

FIG. 2

Examples of Program Information

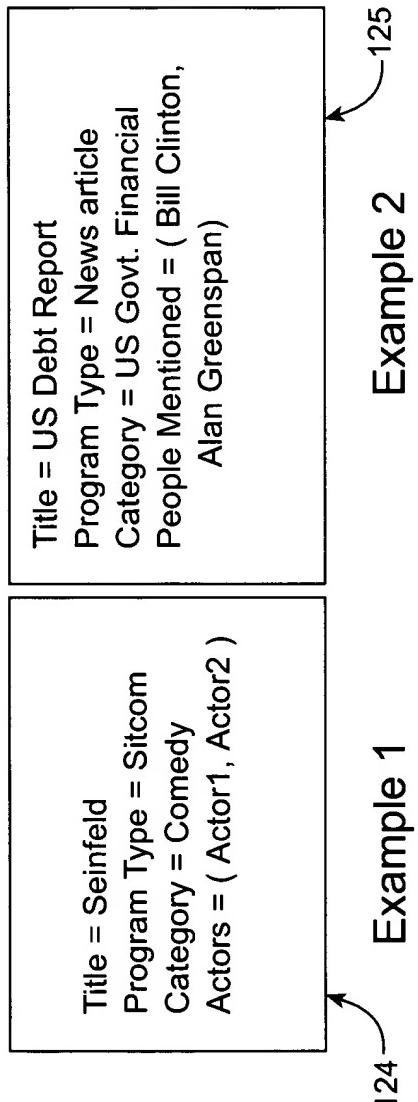


FIG. 3

Examples for Likin for viewer N

Examples for traits

**Movie = 14**  
**Adventure = 3**  
**Sports = 0.3**  
**Mad About You = 5**  
**dynamic trait 1 = 3**  
**Dynamic trait 2 = 5**  
**NBC NEWS = 13**  
**FRIDAY Movie = 18**  
**Premier Mad About You = 15**

127

**Movie**  
**Adventure**  
**Sports**  
**Mad About You**  
**dynamic trait 1**  
**Dynamic trait 2**  
**NBC NEWS**  
**FRIDAY Movie**  
**Premier Mad About You**

126

FIG. 4

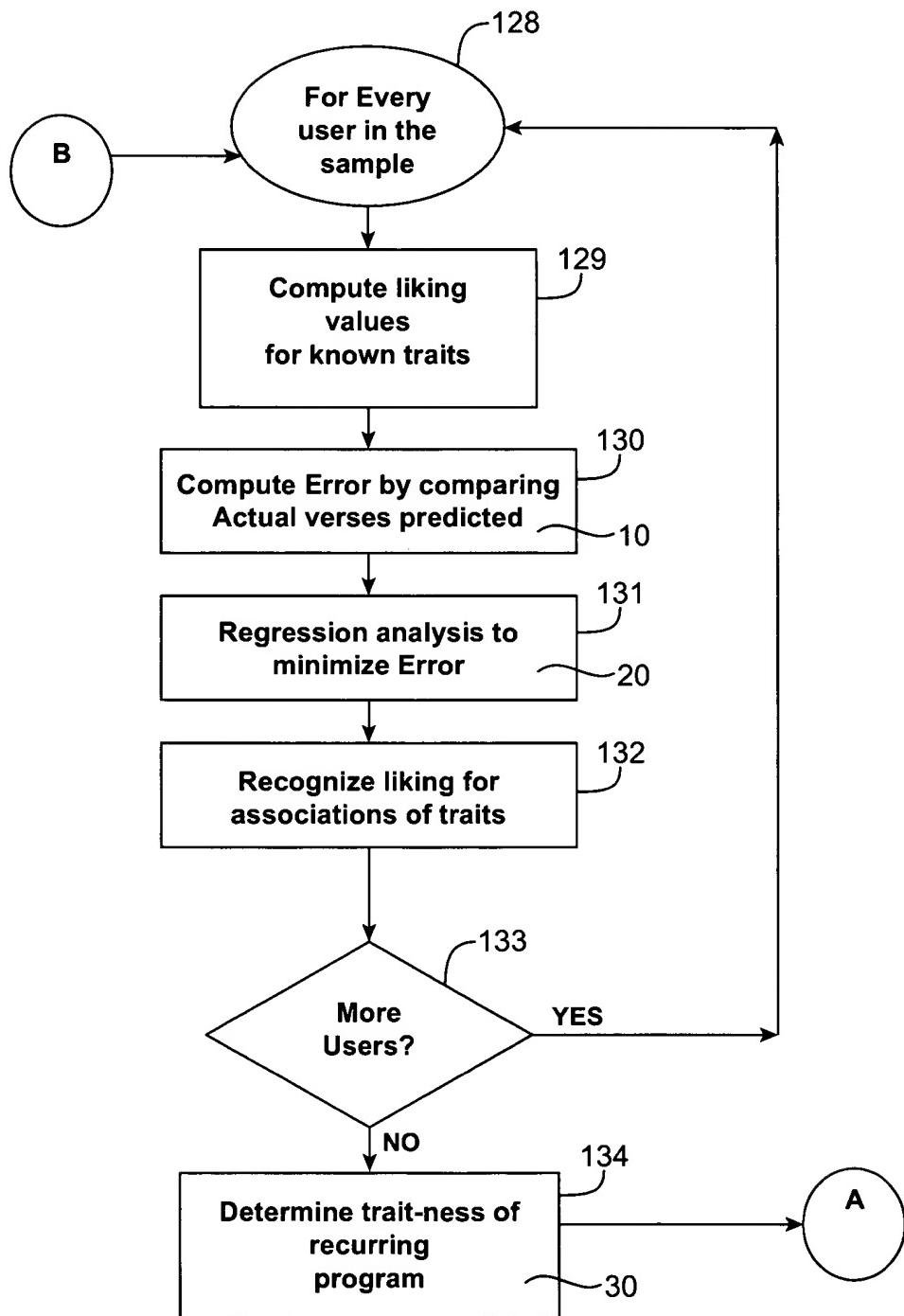


FIG. 5(a)

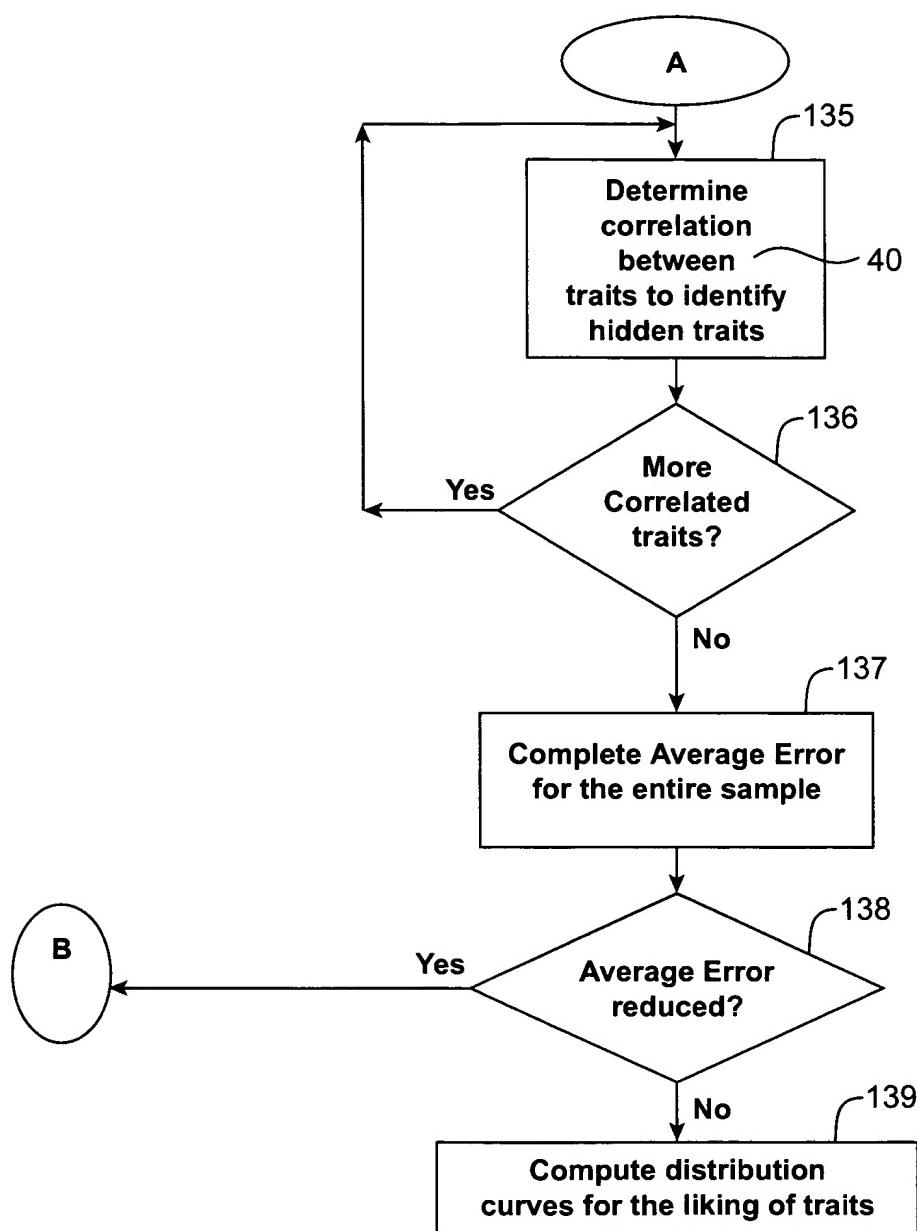
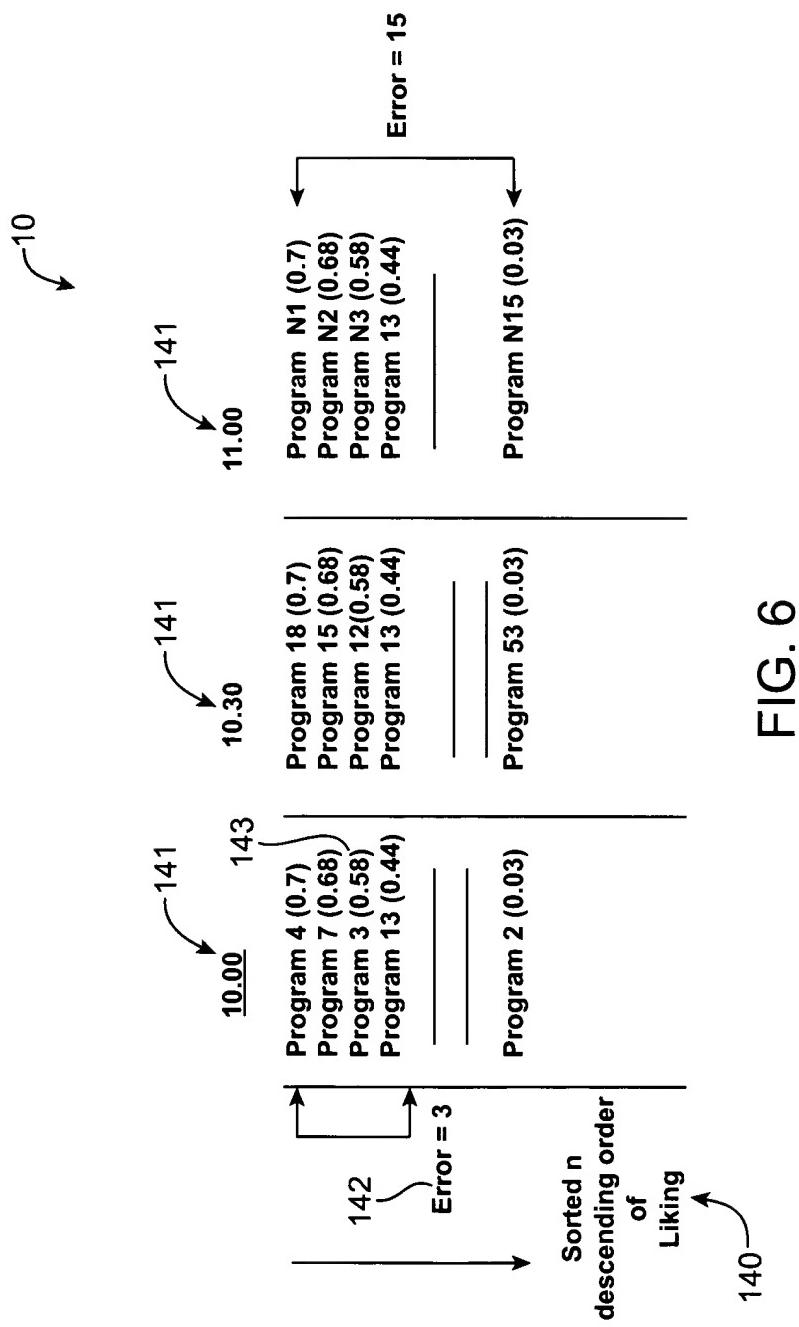


FIG. (5b)

METHOD AND APPARATUS FOR  
DELIVERY OF TARGETED VIDEO  
PROGRAMMING  
Application No. 09/652,478  
Inventor: ISMAIL *et al.*  
Attorney Docket No. MET2.PAU.04.CIP



**FIG. 6**

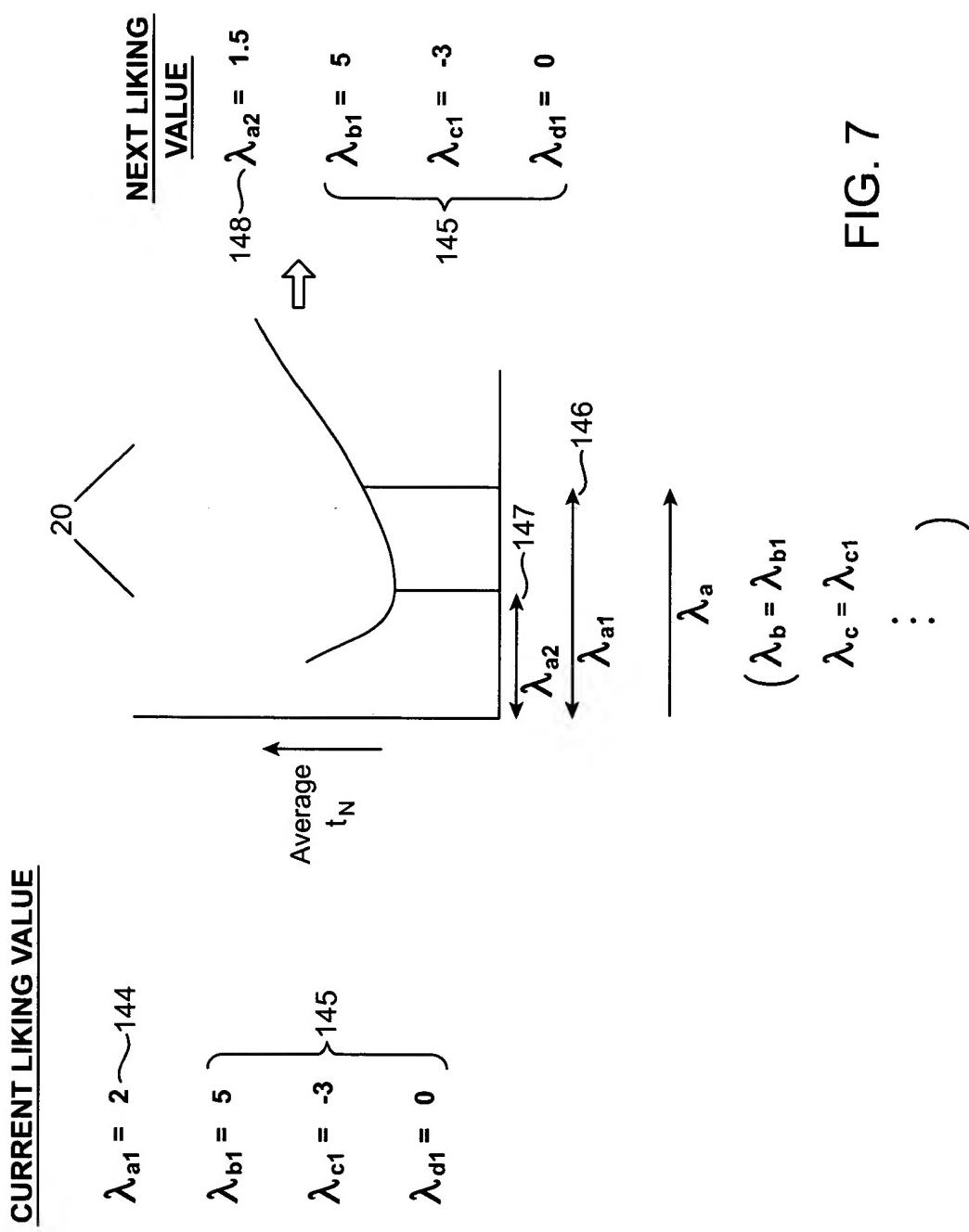
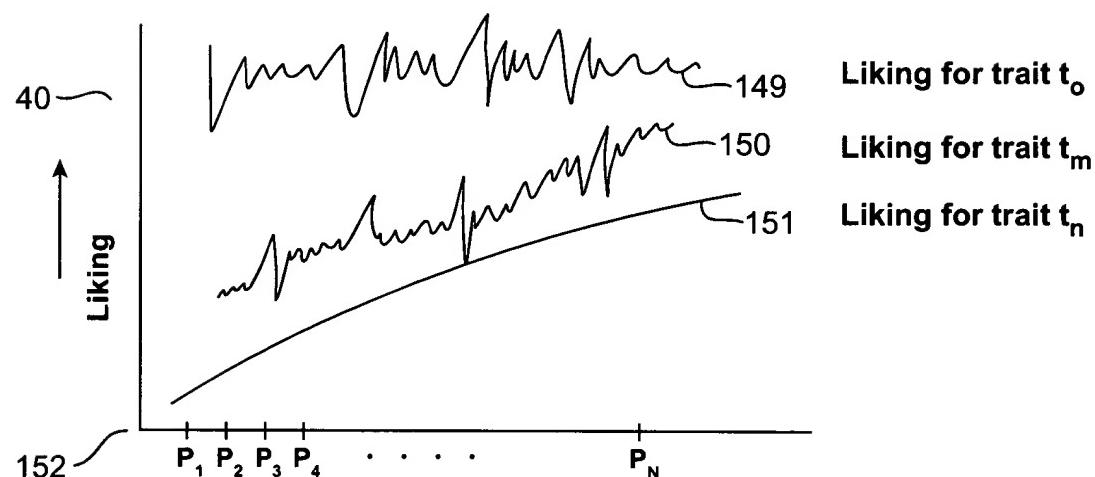


FIG. 7

**RECOGNIZING HIDDEN TRAITS IN PROGRAMS**



$t_m$  &  $t_n$  are correlated

$\Rightarrow t_m$  can be expressed as  $t_m = t_x + t_{m'}$

$t_n$  can be expressed as  $t_n = Ct_x + t_{m'}$

**FIG. 8**

Computing Traitness of a trait is a program

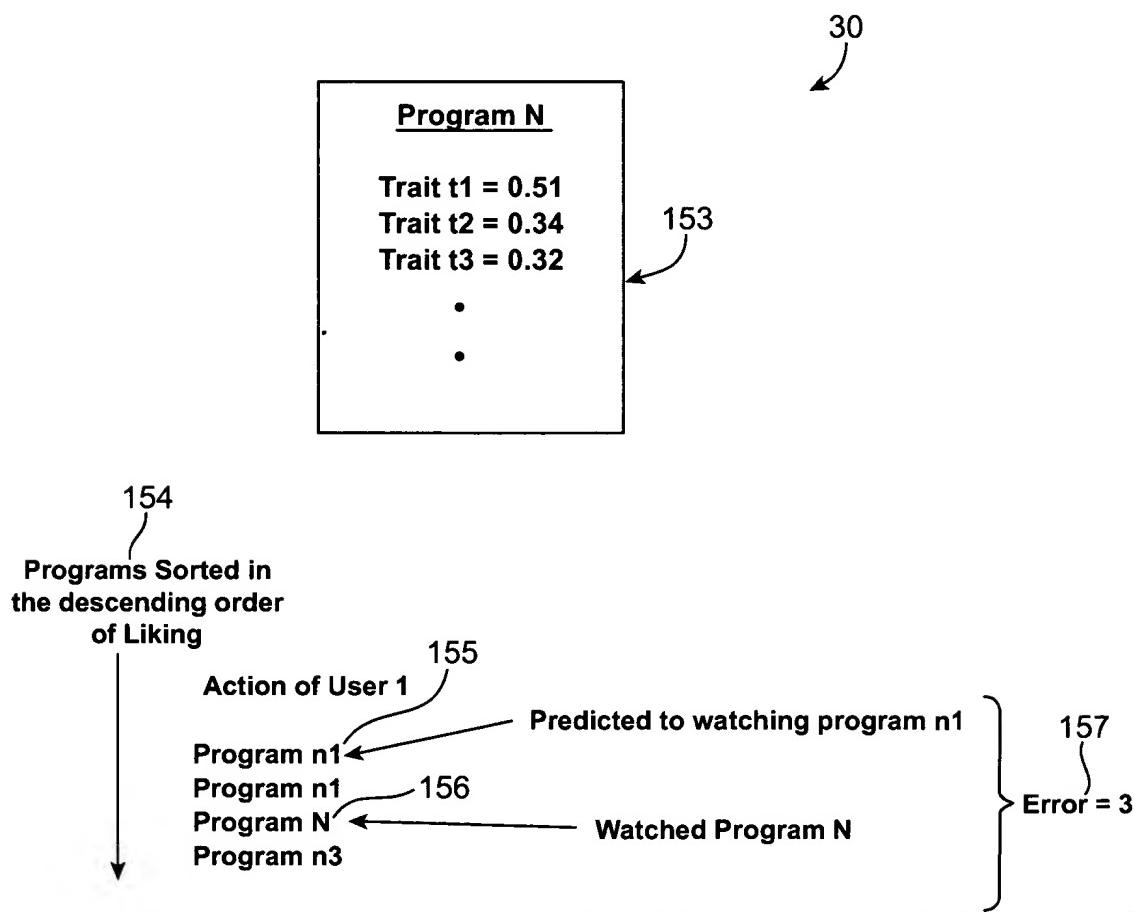


FIG. 9(a)

Computing Traitness of a trait a program

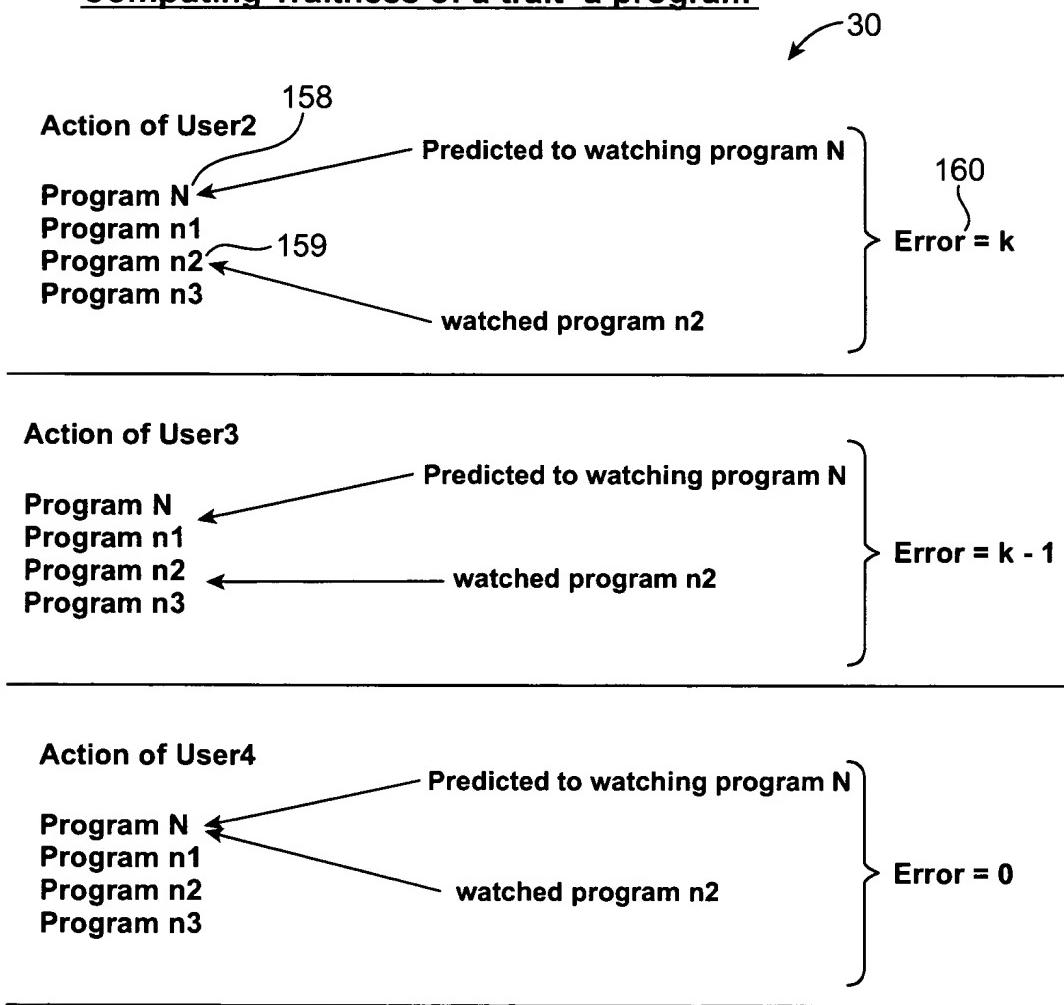


FIG. 9(b)

COMPUTING TRAITNESS OF A TRAIT IN A PROGRAM

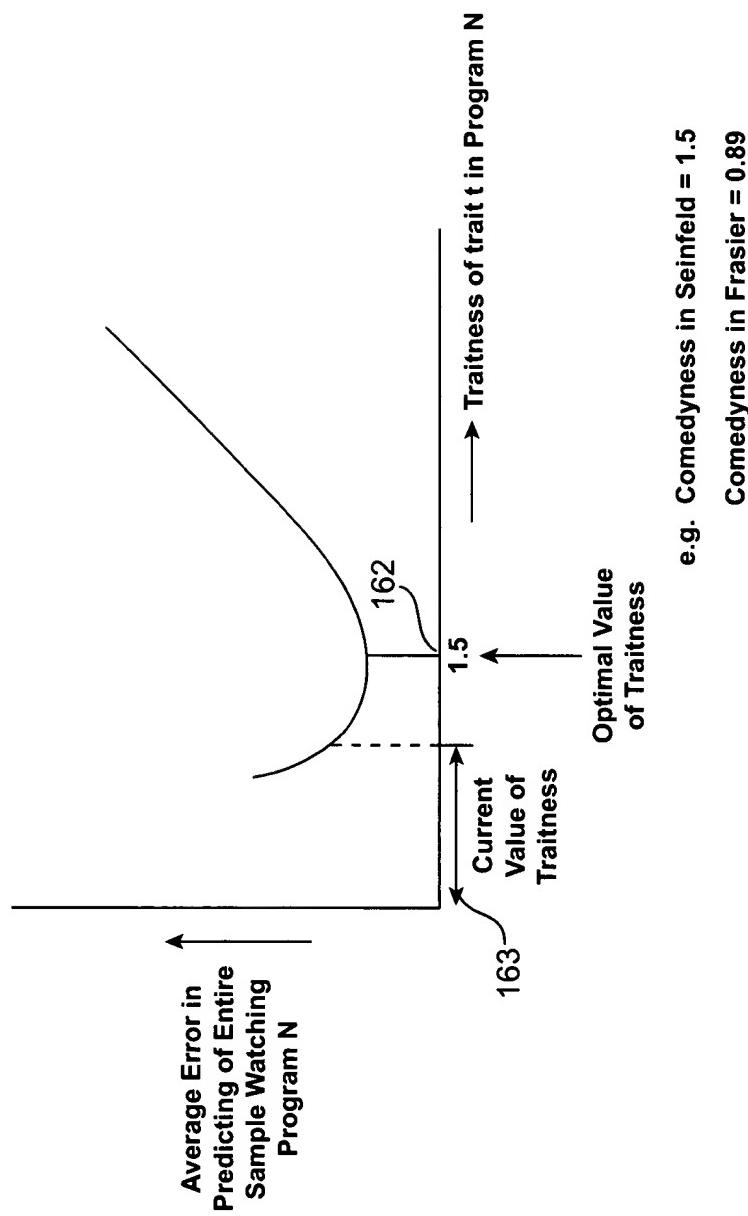


FIG. 9(c)

Example for Liking Distribution Record format

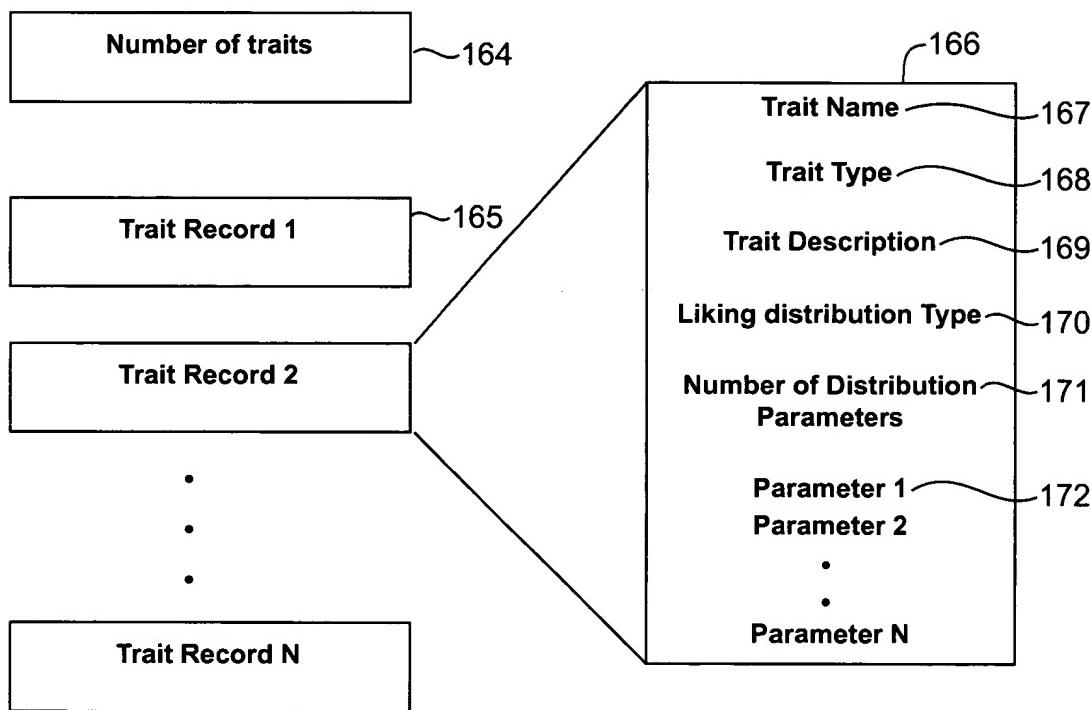


FIG. 10

**Some Sample Values For Fields in trait Record**

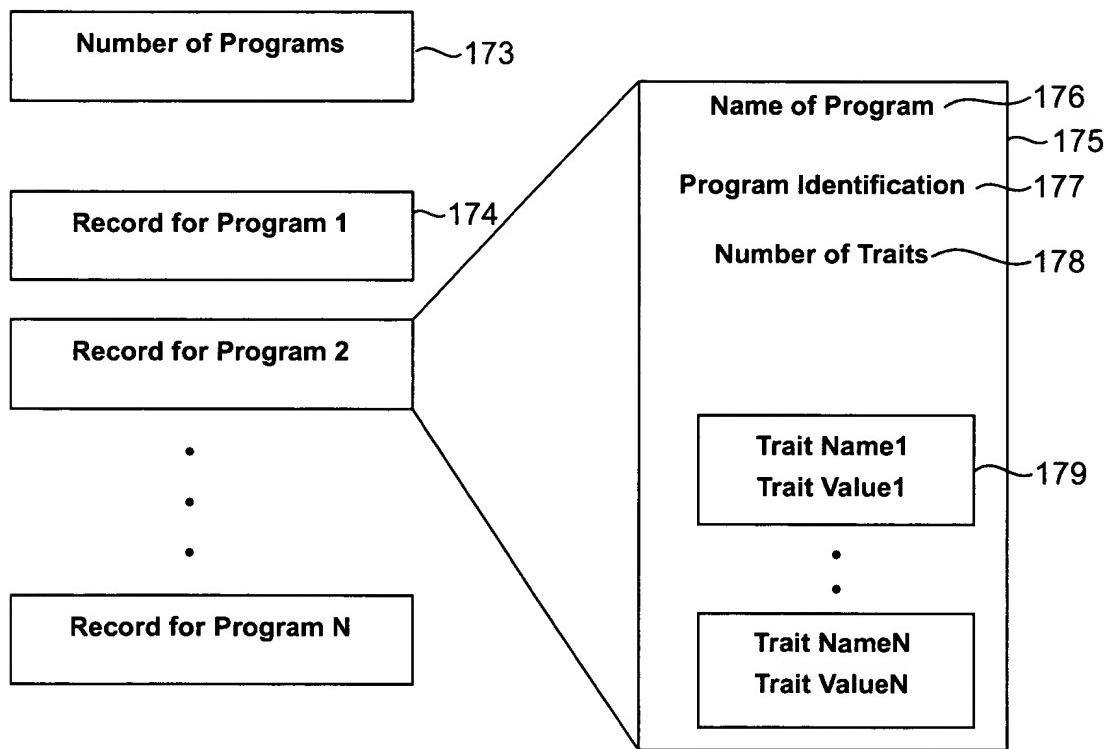
| <u>Trait type</u> | <u>Trait Description</u>  |
|-------------------|---------------------------|
| Static            | (NBC, "NEWS"),            |
| dynamic           | SUBSTRING("CIA") IN DESC. |
| Association       | TITLE                     |
| Generated         |                           |

| <u>Distribution</u> | <u>Distribution Parameters</u> |
|---------------------|--------------------------------|
| Normal              | Mean = 13, Deviation = 2       |
| Exponential         |                                |
| Defined type 1      |                                |
| Defined type 2      |                                |

FIG. 11

**Example for Traitness of recurring Programs**



**FIG. 12**

Example For Broadcasting traitness as a part of EPG Data

Program Info

**Seinfeld,**  
**NBC,**  
**Comedy = 0.07**  
**sitcom,**  
**Dynamic trait 1 = 0.1**

•  
•

**Actor = Seinfeld**

FIG. 13

Example for Selection Record

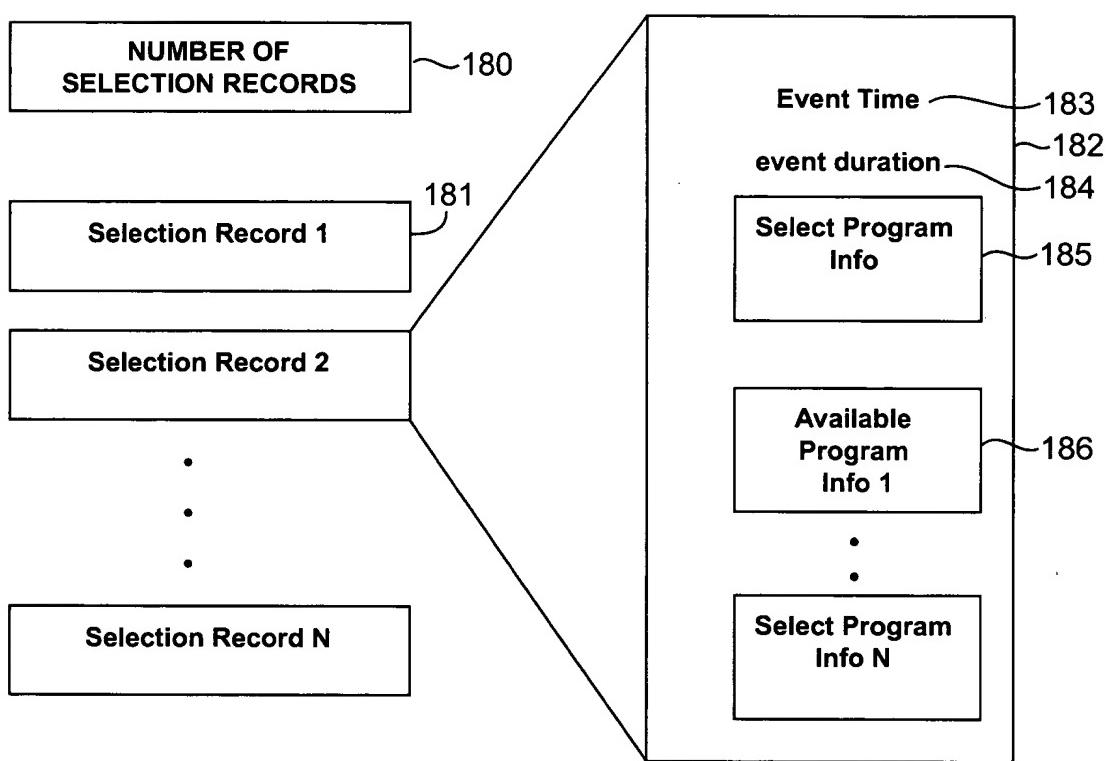


FIG. 14

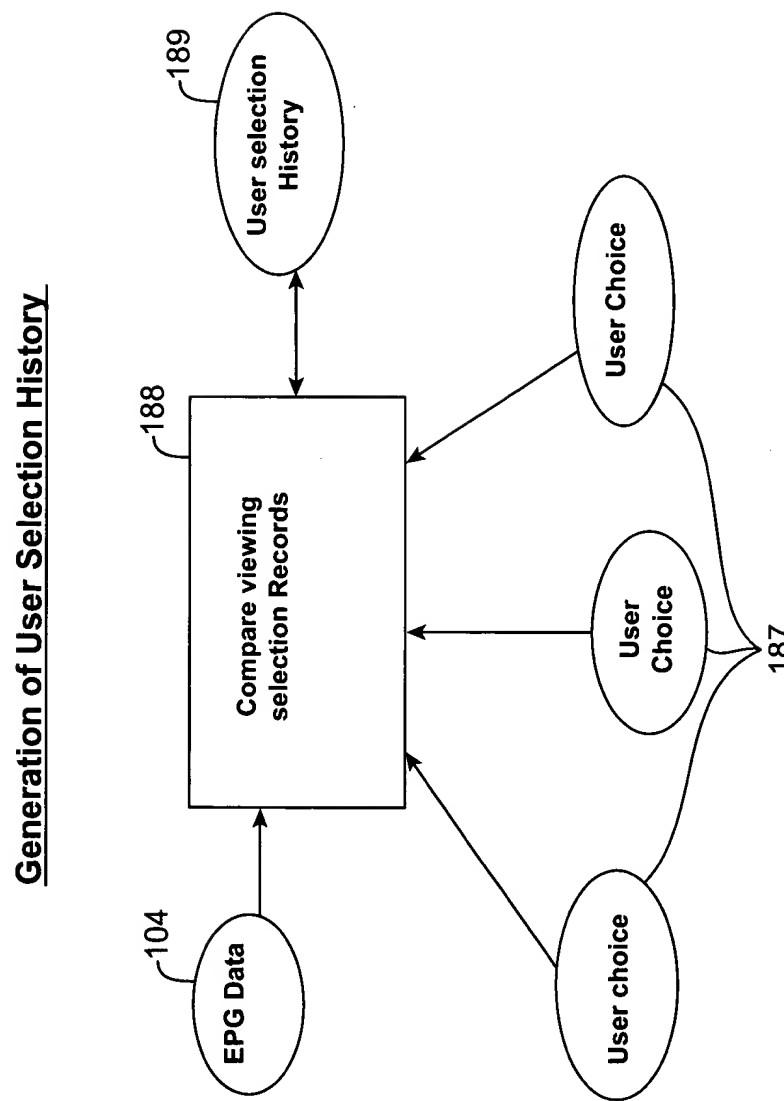
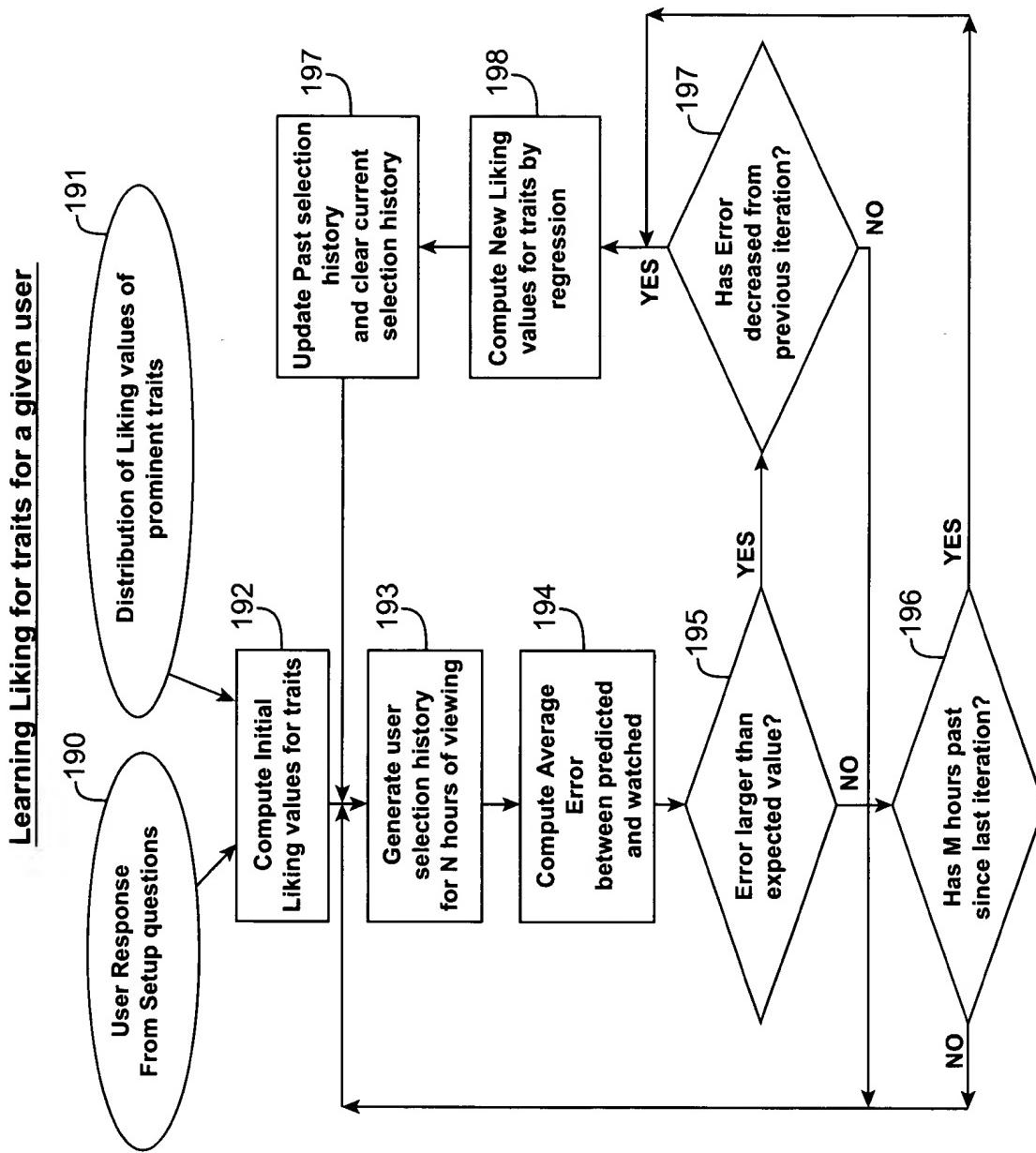


FIG. 15

FIG. 16



**Computing Relevance**

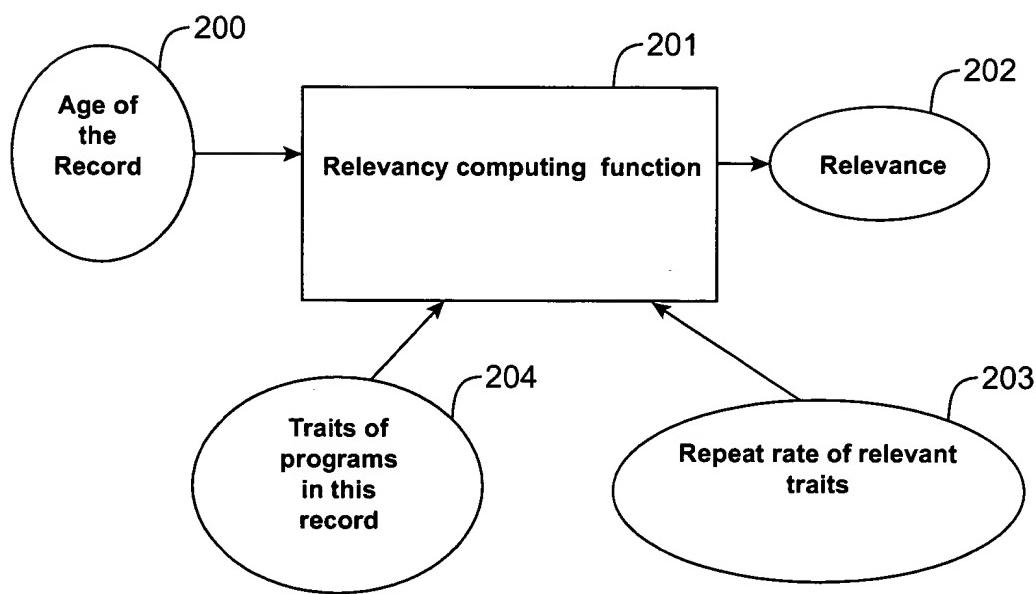


FIG. 17(a)

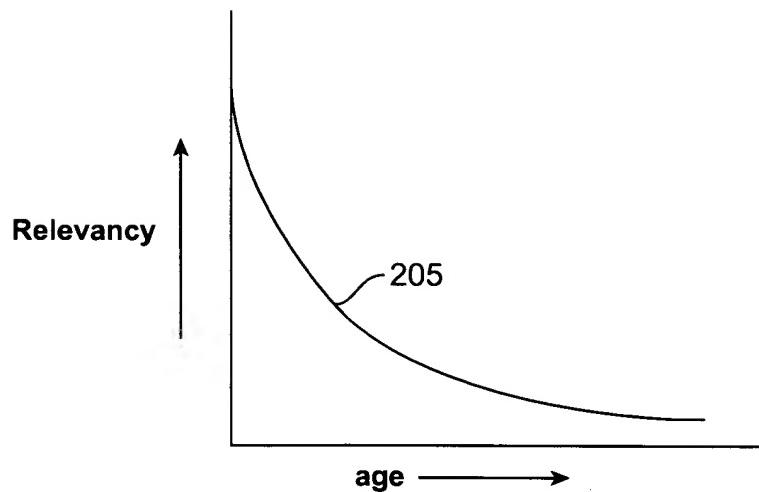


FIG. 17(b)

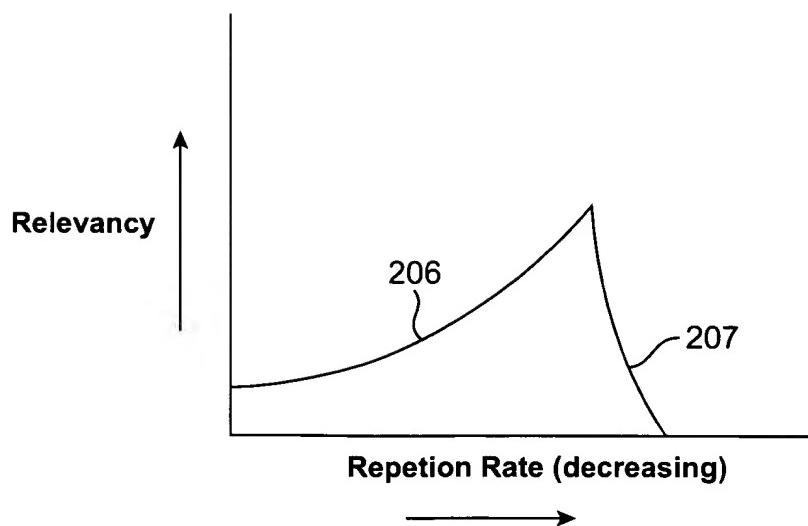


FIG. 17(c)

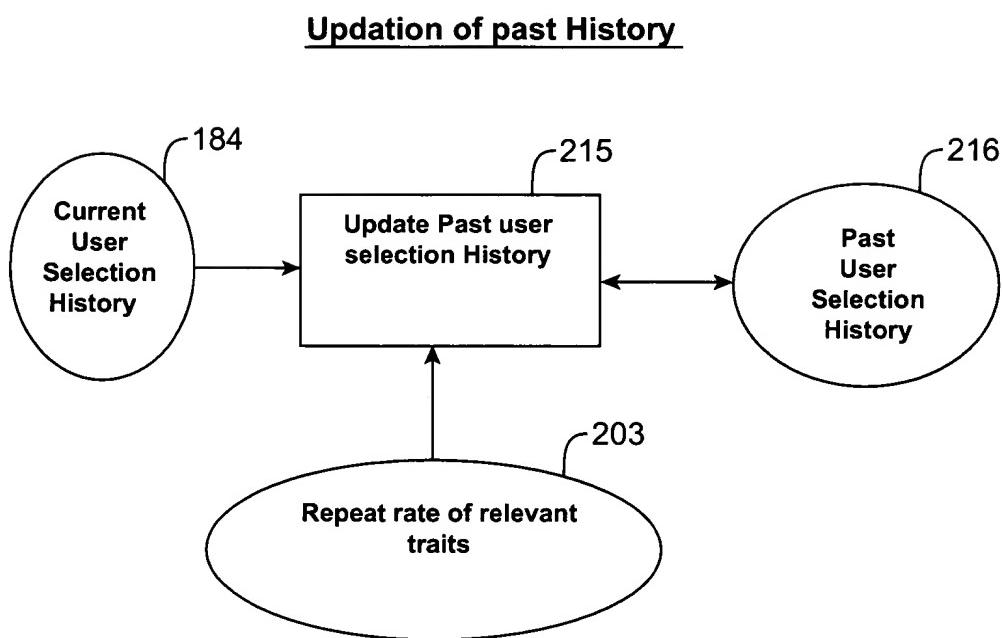


FIG. 18(a)

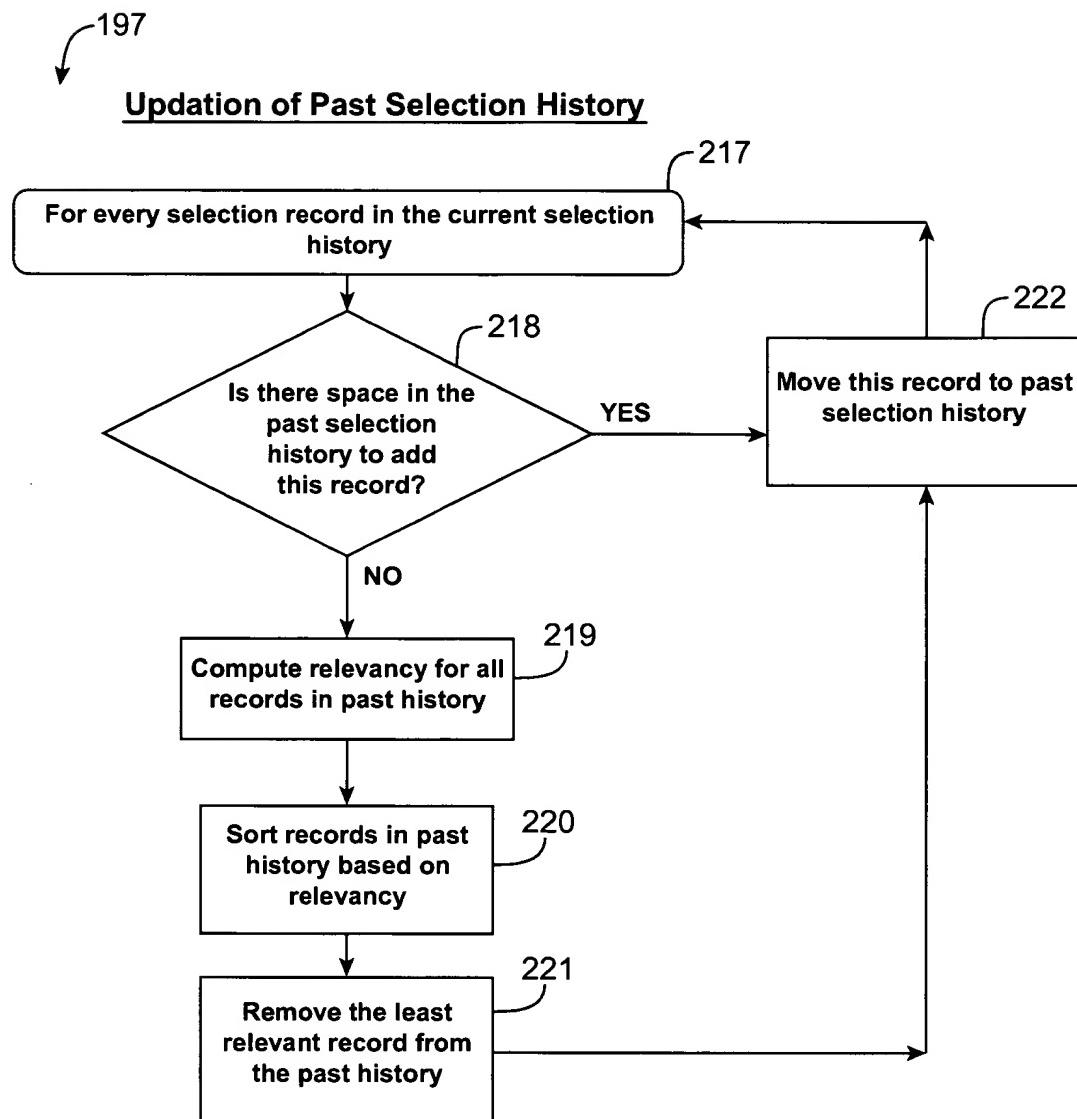


FIG. 18(b)

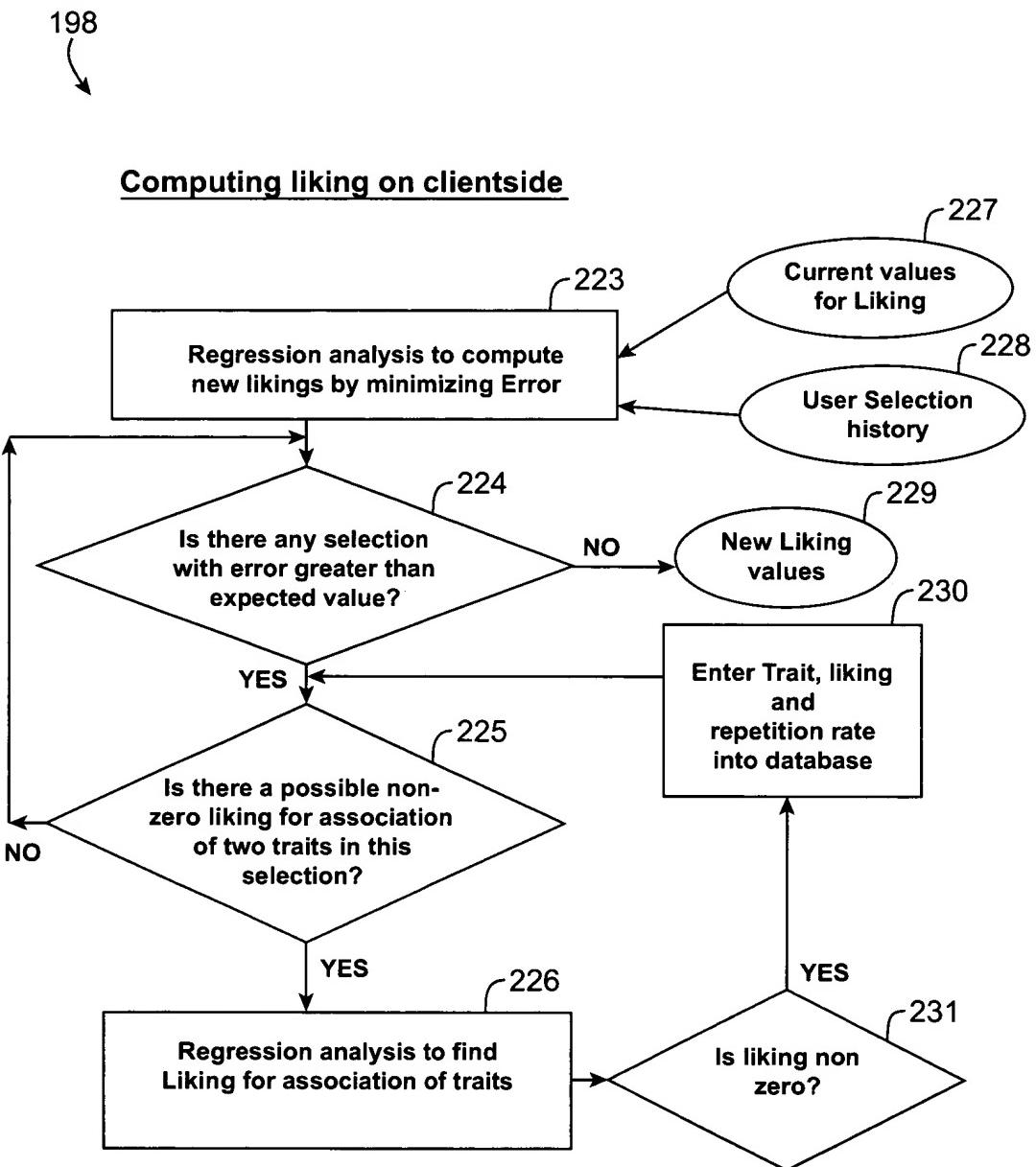


FIG. 19

Computing scores for programs for future predictions

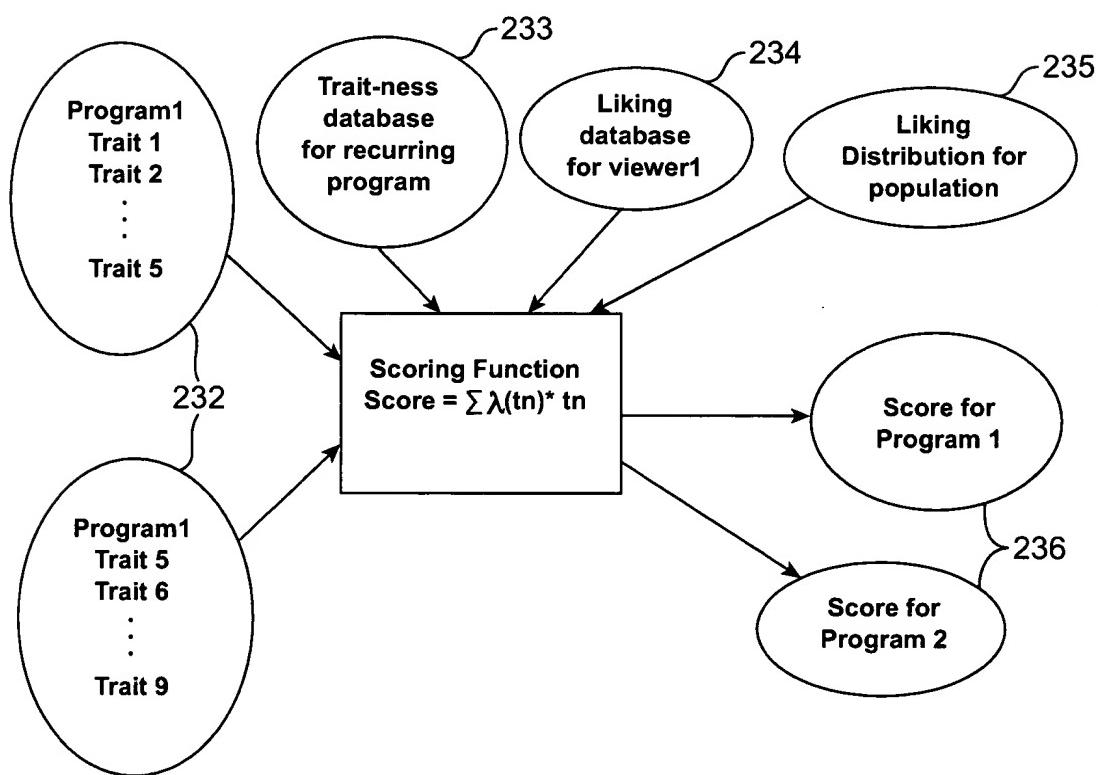


FIG. 20

Distribution of Income in Sample

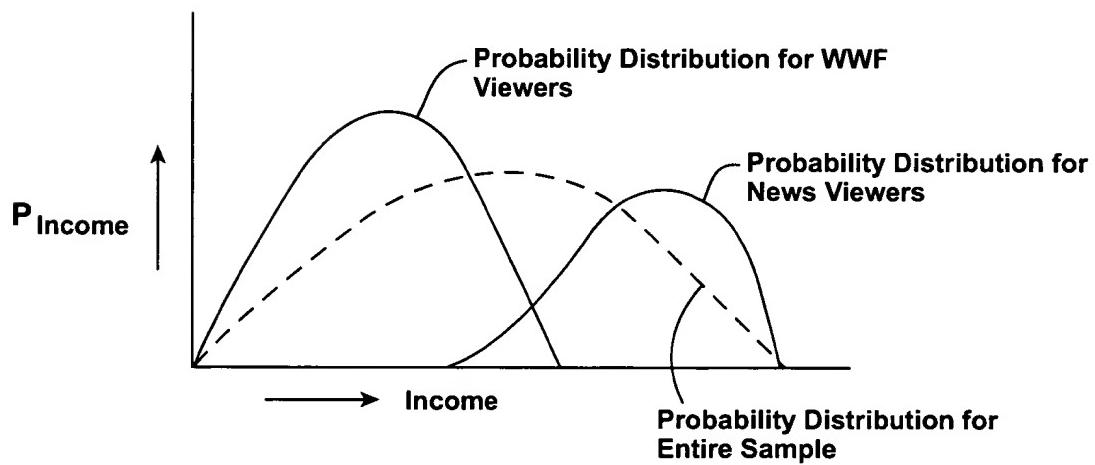
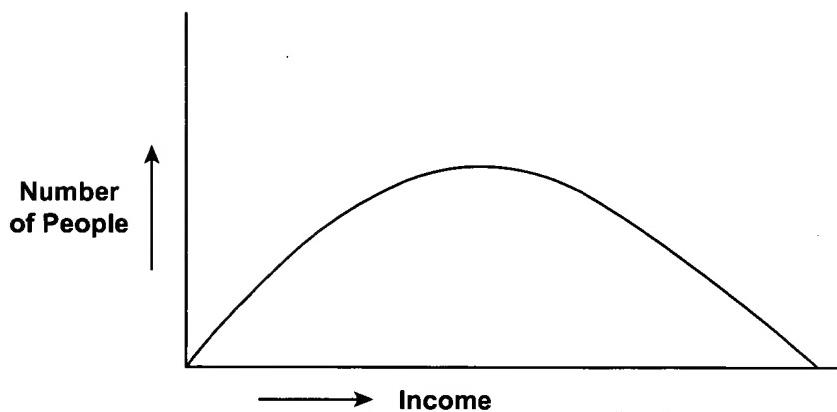


FIG. 21(a)

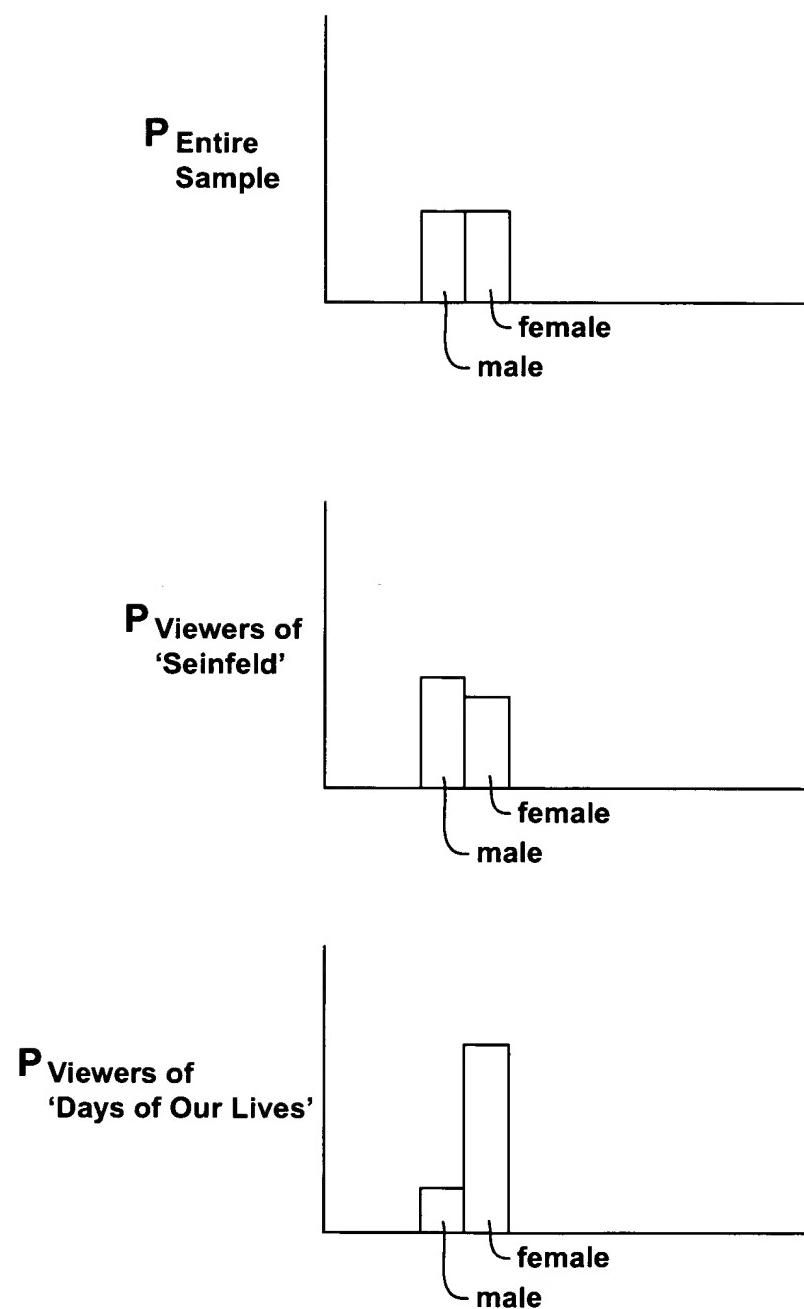


FIG. 21(b)

## SYSTEM ARCHITECTURE

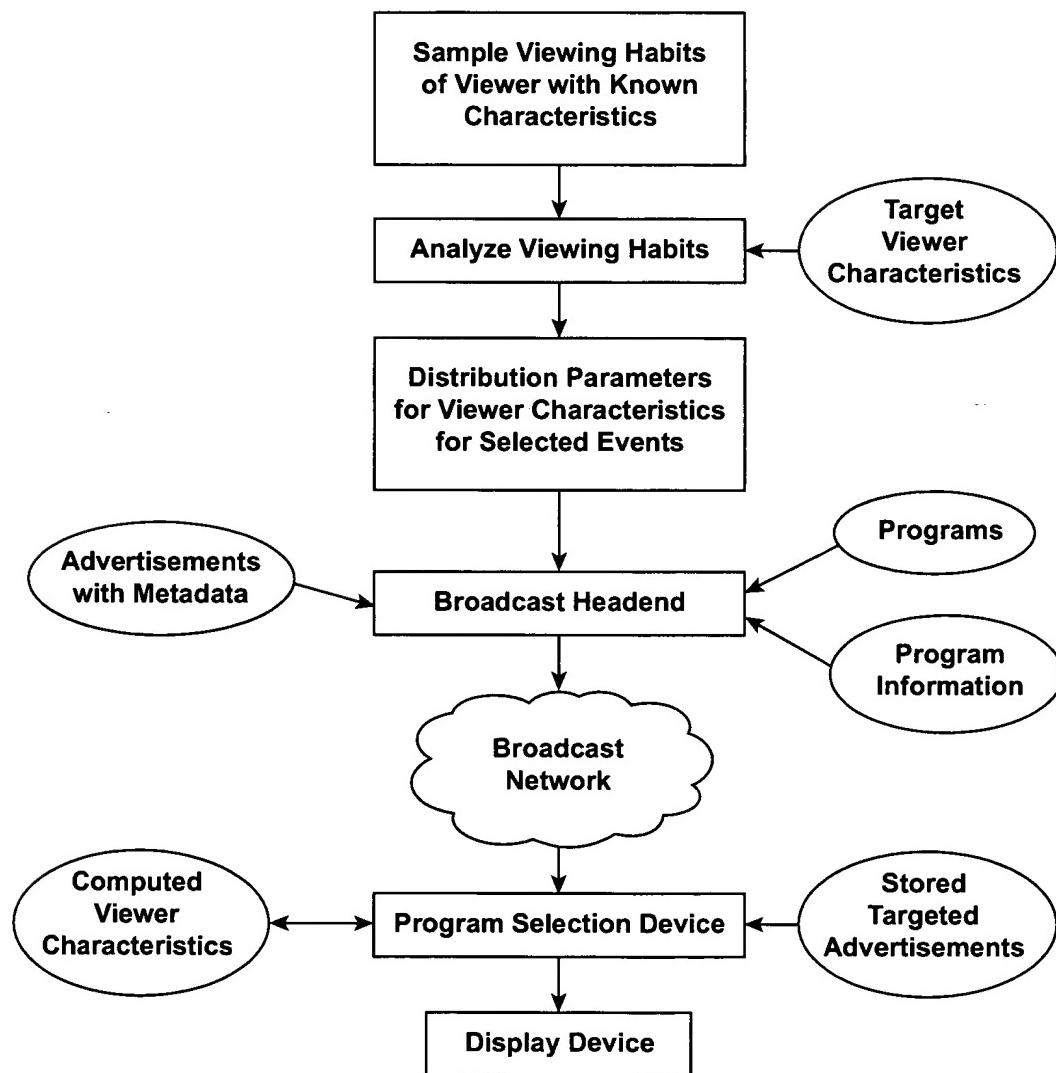


FIG. 22

+

29 / 50

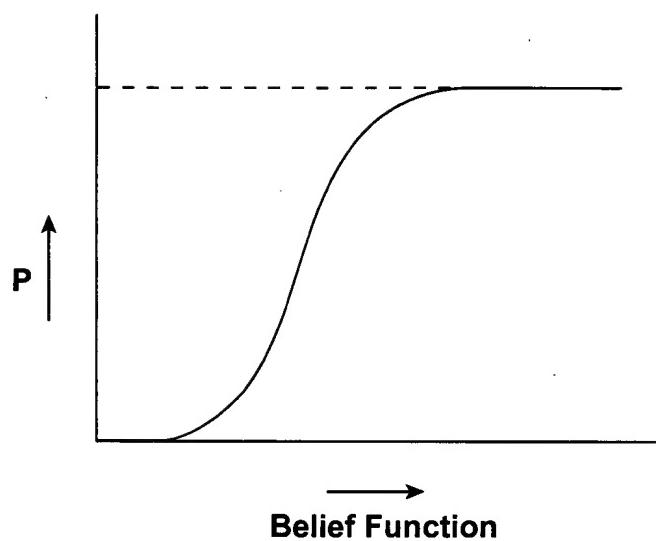


FIG. 23a

+

**Demographic Trait Record format**

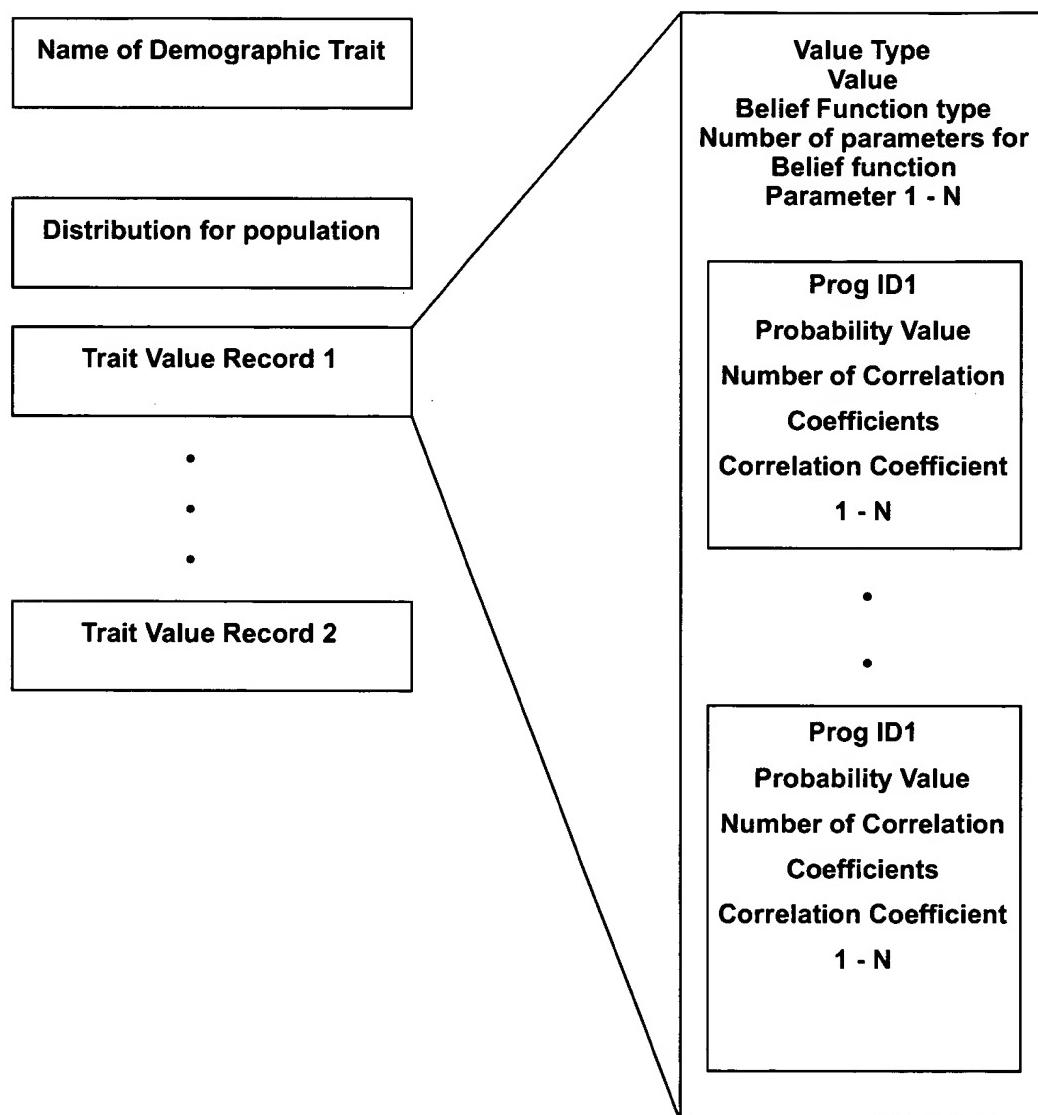


FIG. 23b

Advertisement Targeting Record format

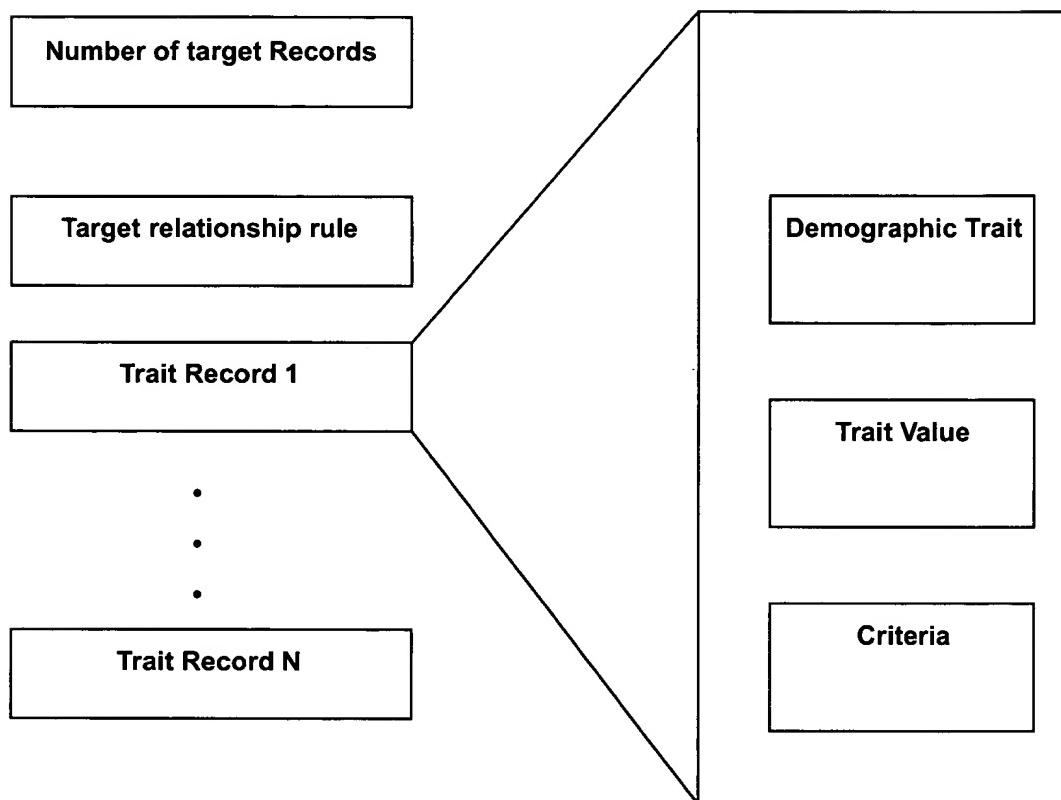


FIG. 23c

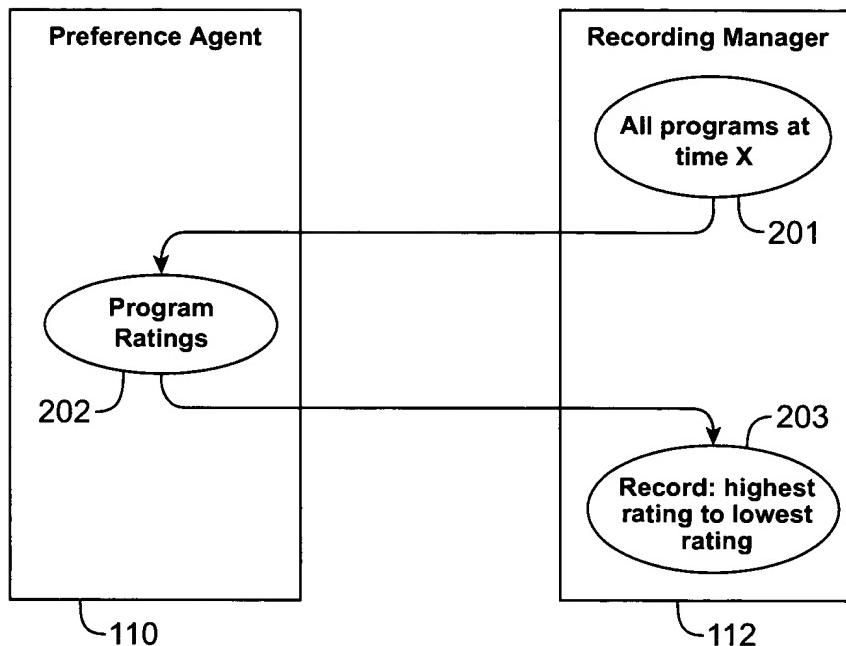


FIG. 24

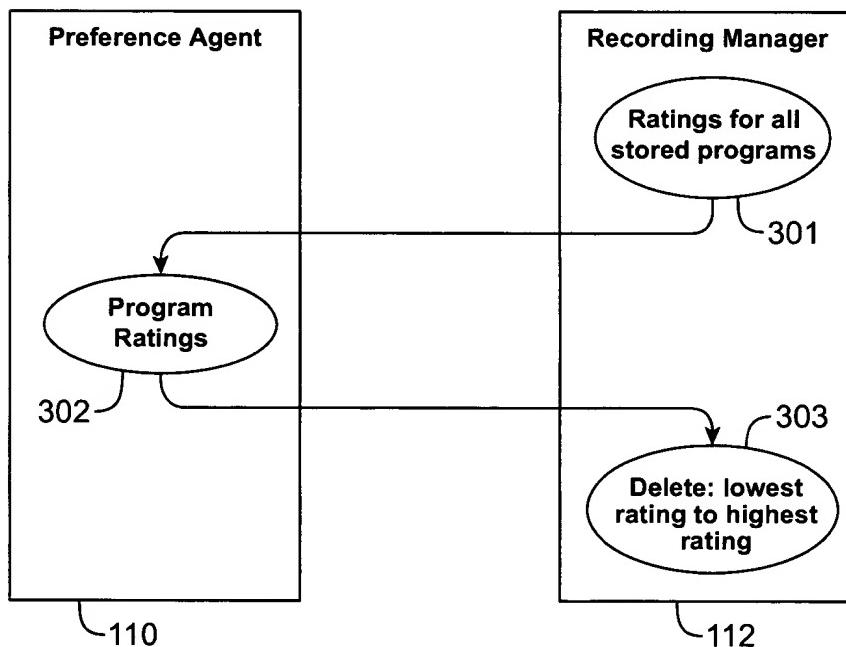


FIG. 25

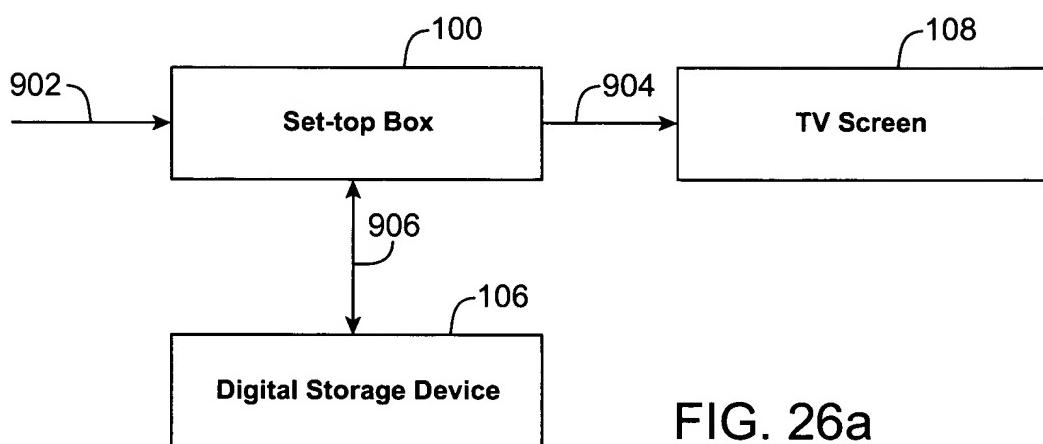


FIG. 26a

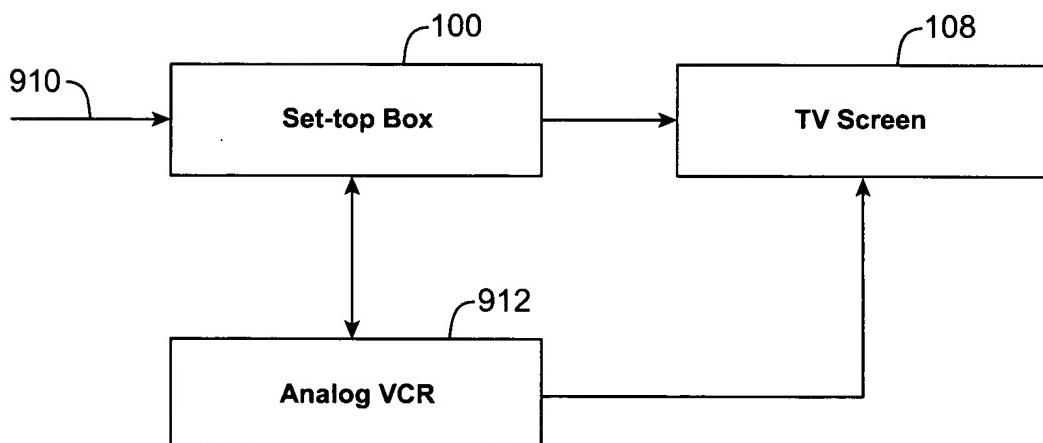


FIG. 26b

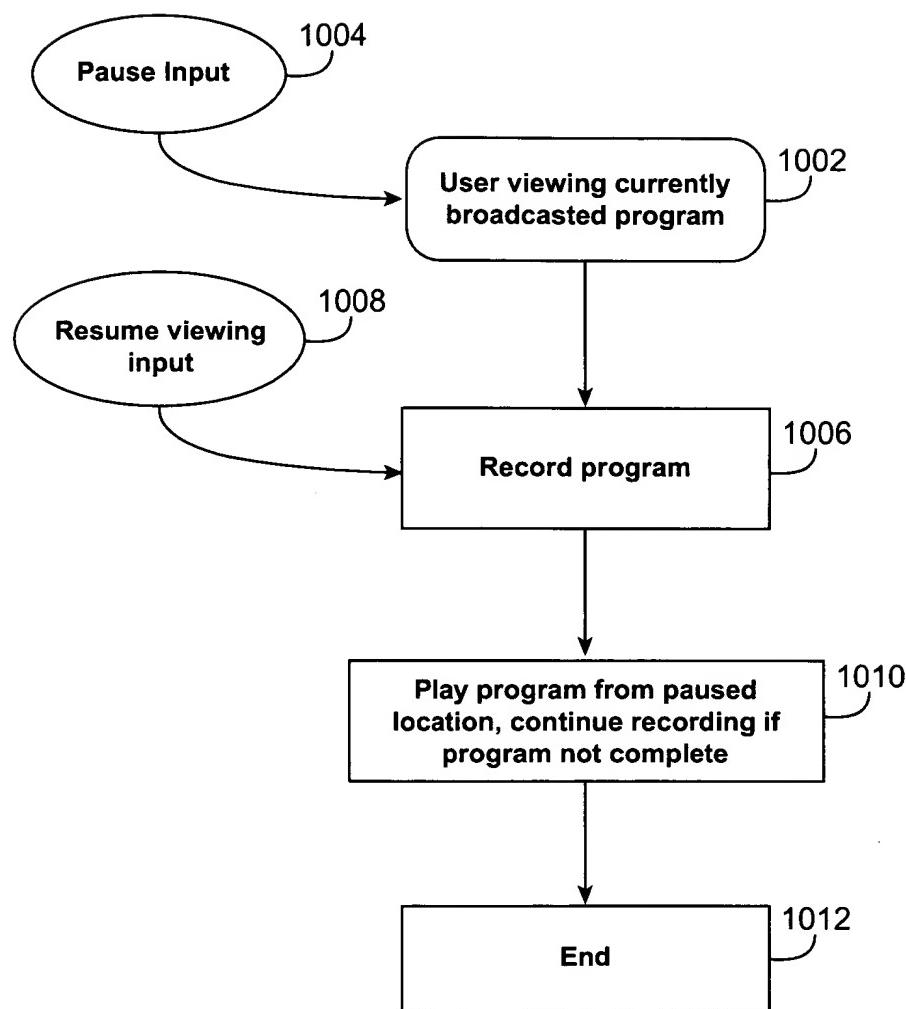


FIG. 27

METHOD AND APPARATUS FOR  
DELIVERY OF TARGETED VIDEO  
PROGRAMMING  
Application No. 09/652,478  
Inventor: ISMAIL *et al.*  
Attorney Docket No. MET2.PAU.04.CIP

35 / 50

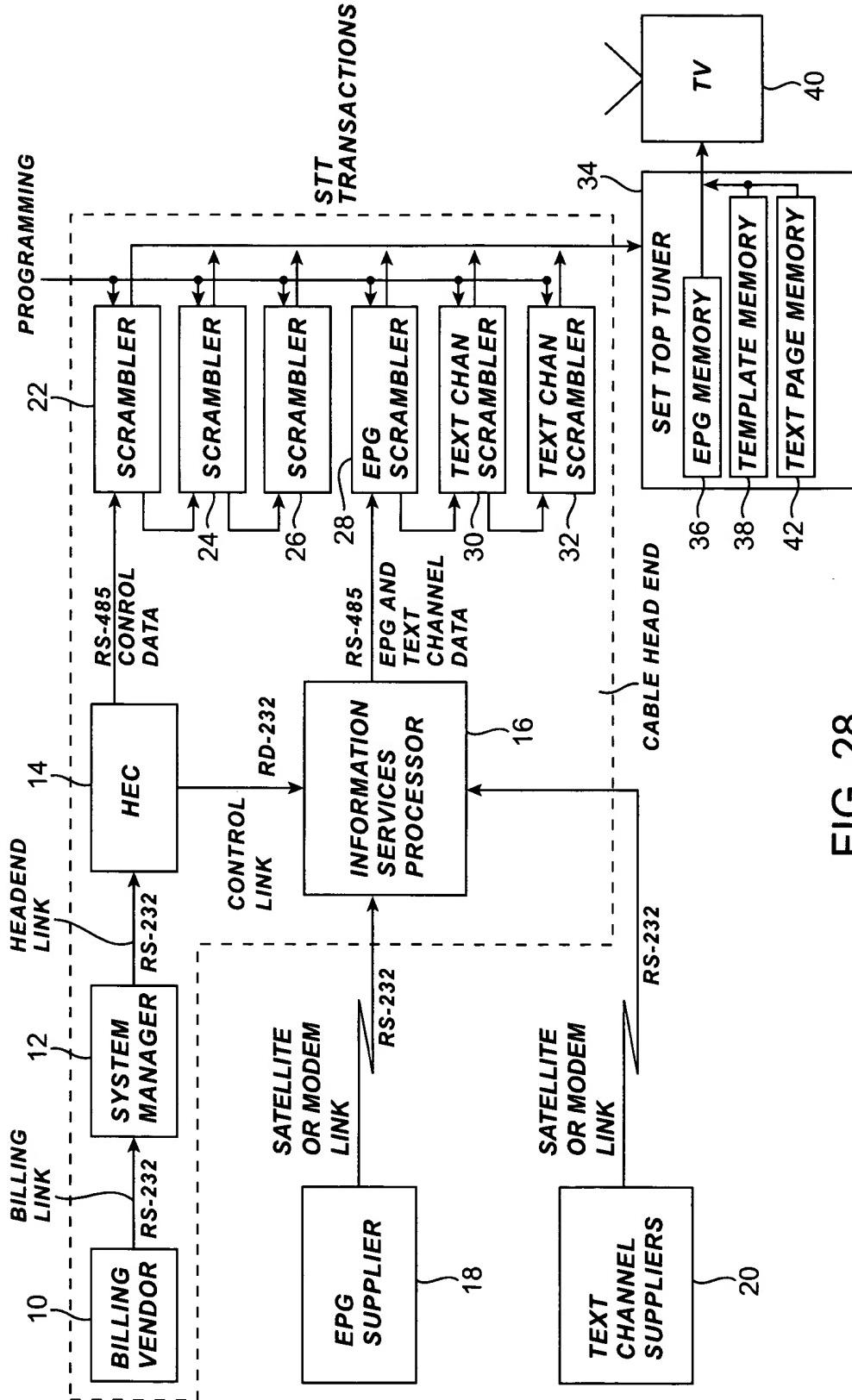


FIG. 28

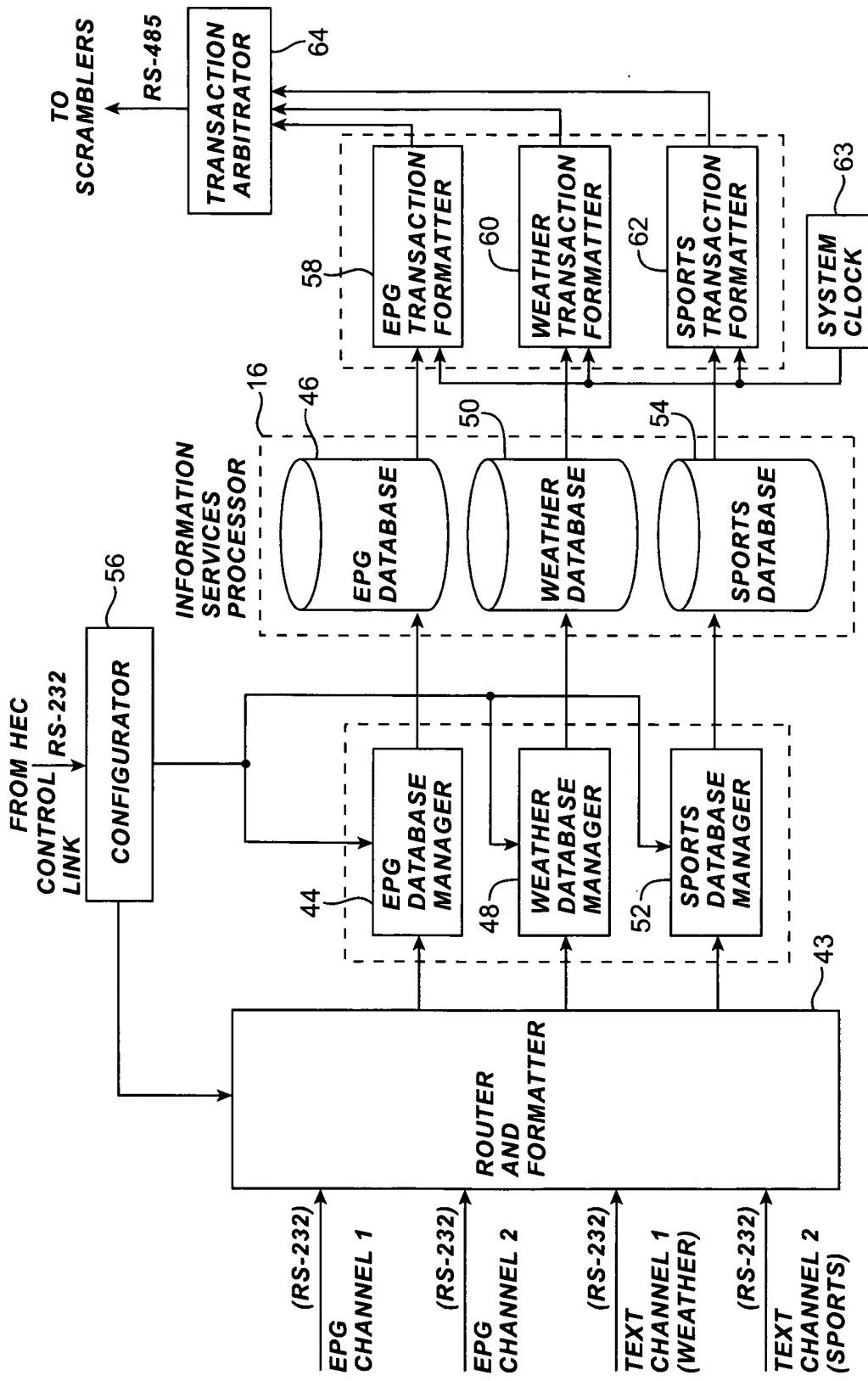


FIG. 29

37 / 50

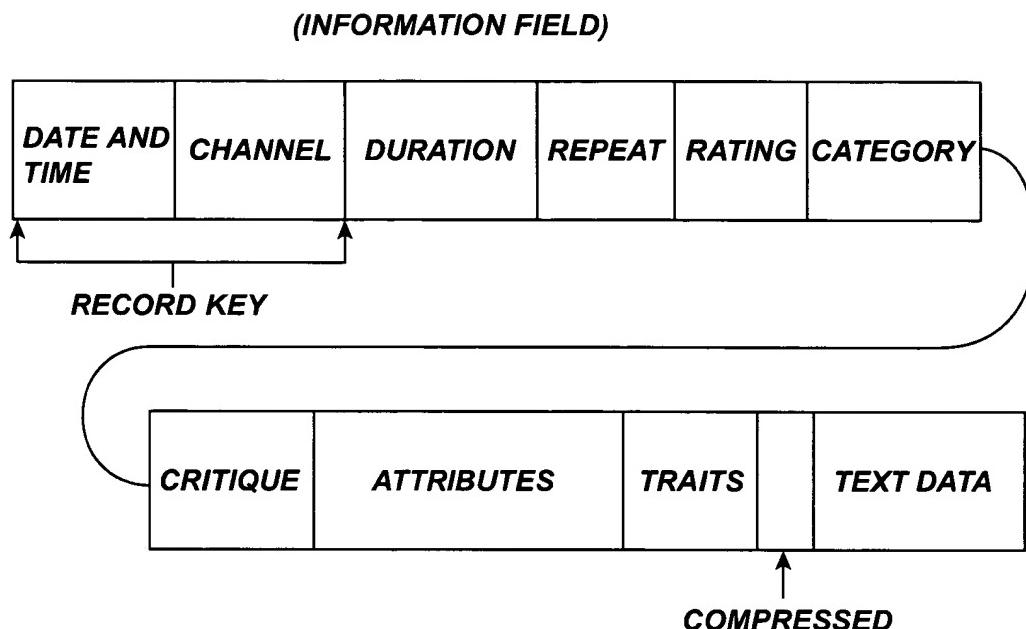


FIG. 30

(TO SCRAMBLERS)

|                          |                           |                   |   |                           |        |
|--------------------------|---------------------------|-------------------|---|---------------------------|--------|
| BEGINNING FLAG<br>1 BYTE | STATION ADDRESS<br>1 BYTE | CONTROL<br>1 BYTE | INFOR-<br>MATION<br>FIELD<br><i>n</i> BYTES | FRAME<br>CHECK<br>2 BYTES | ENDING |
|--------------------------|---------------------------|-------------------|---|---------------------------|--------|

FIG. 31

**EPG TRANSACTION FORMATTER 58**

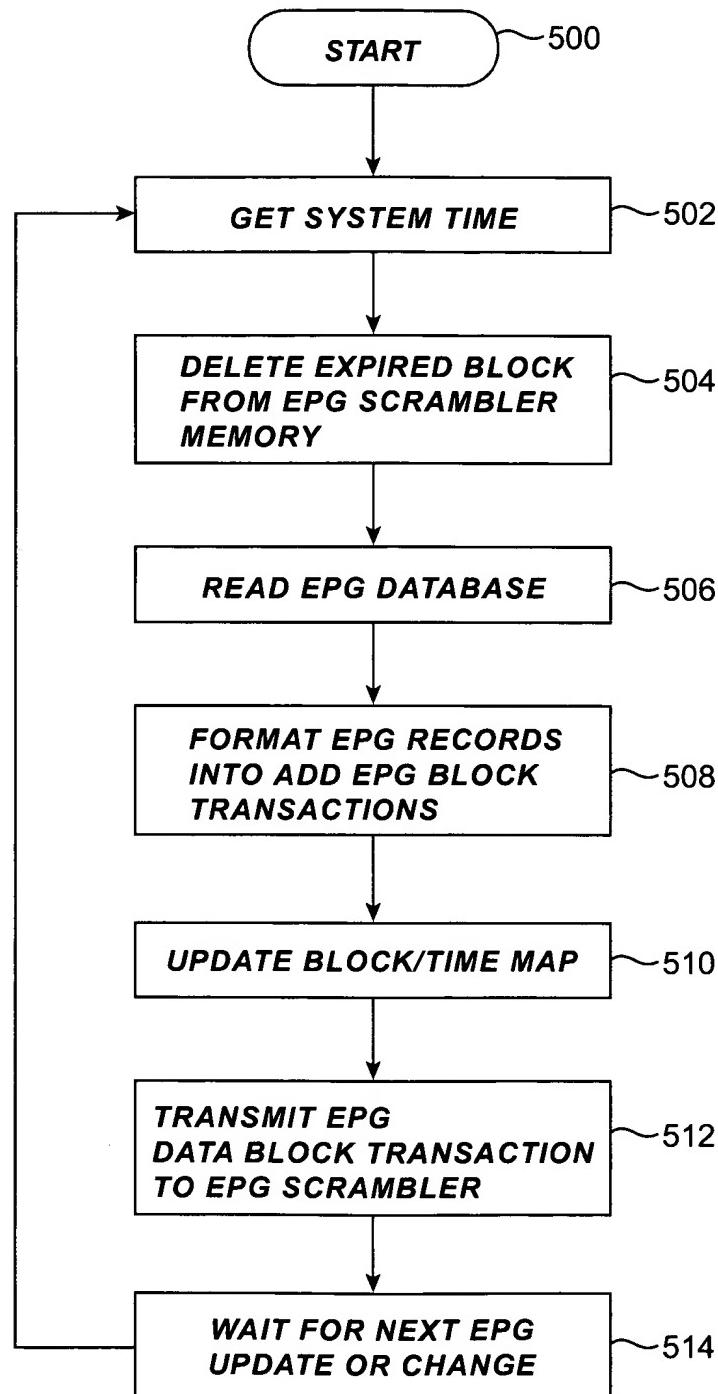
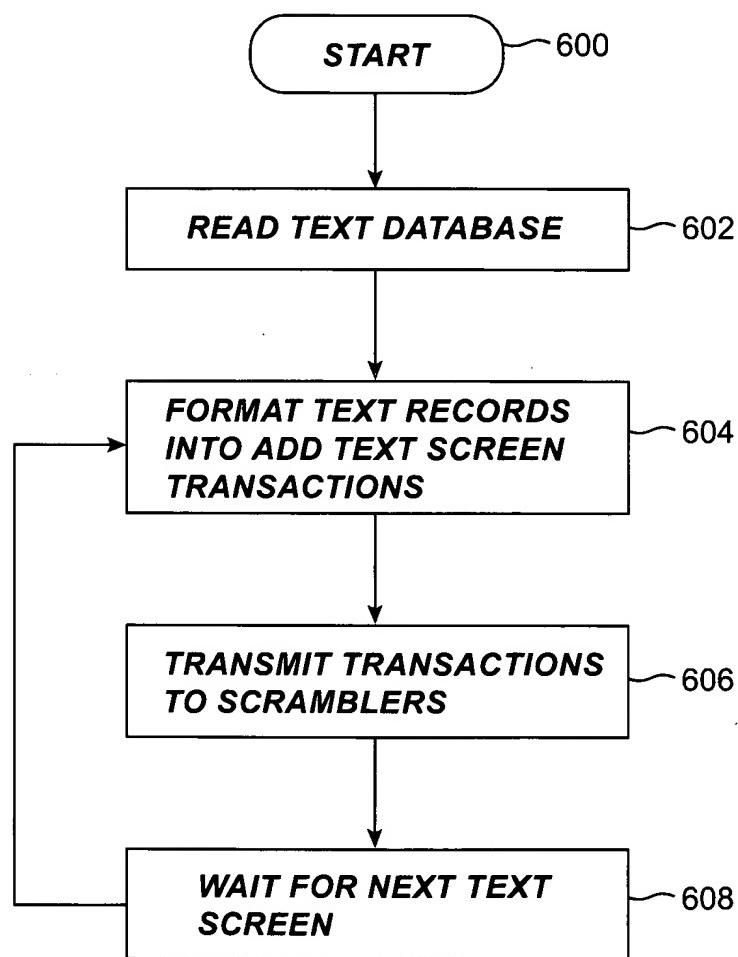


FIG. 32

***TEXT CHANNEL TRANSACTION FORMATTER 60,62***



**FIG. 33**

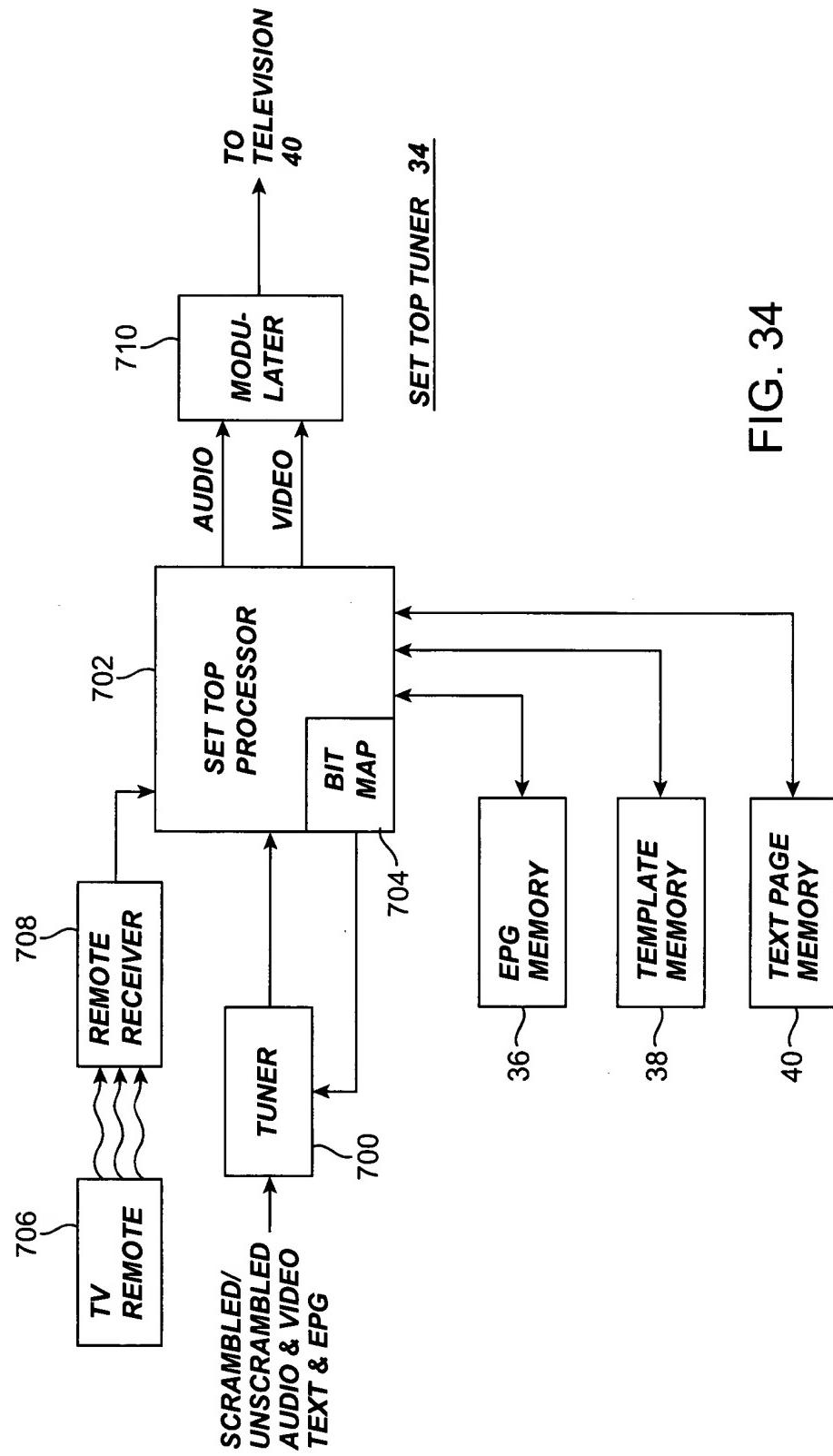
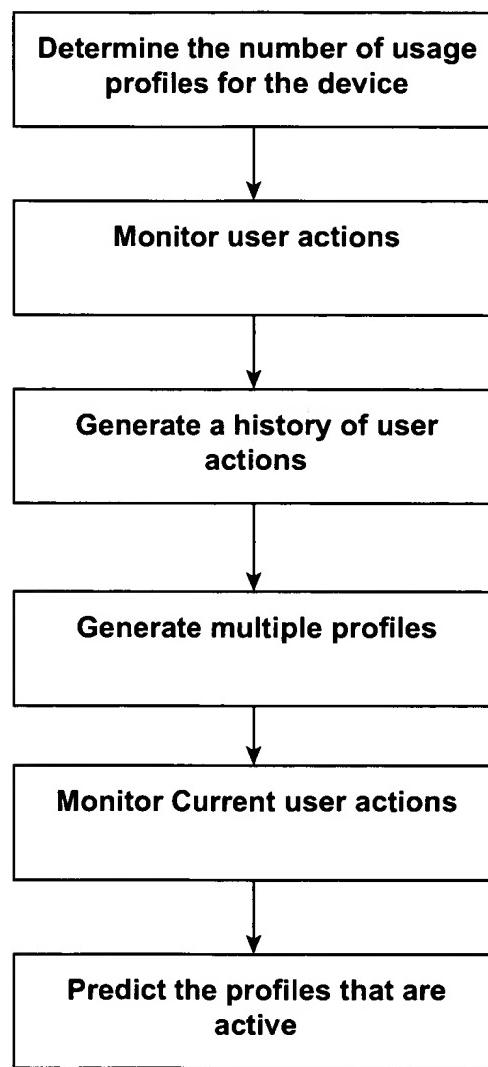


FIG. 34

**Process for automatically creating multiple profiles and  
automatically identifying currently active profiles**



**FIG. 35**

Process for generating multiple profiles

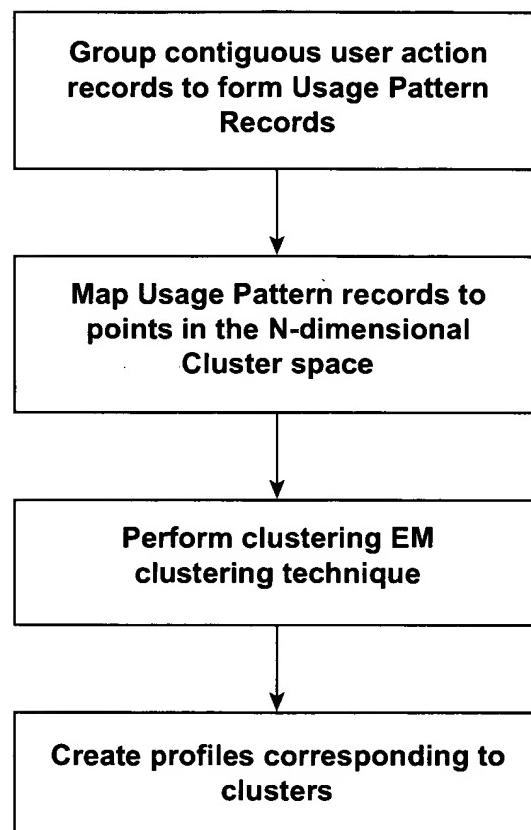
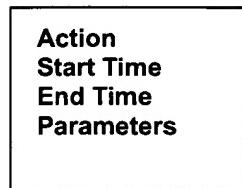
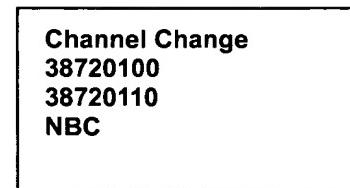


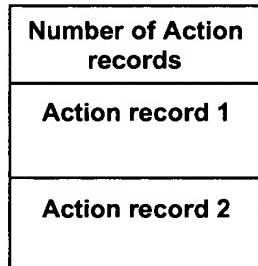
FIG. 36



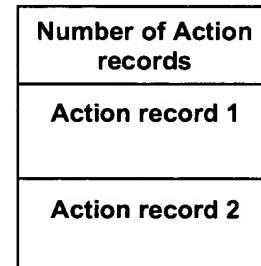
B) Format of user action record



B) Example of user action record

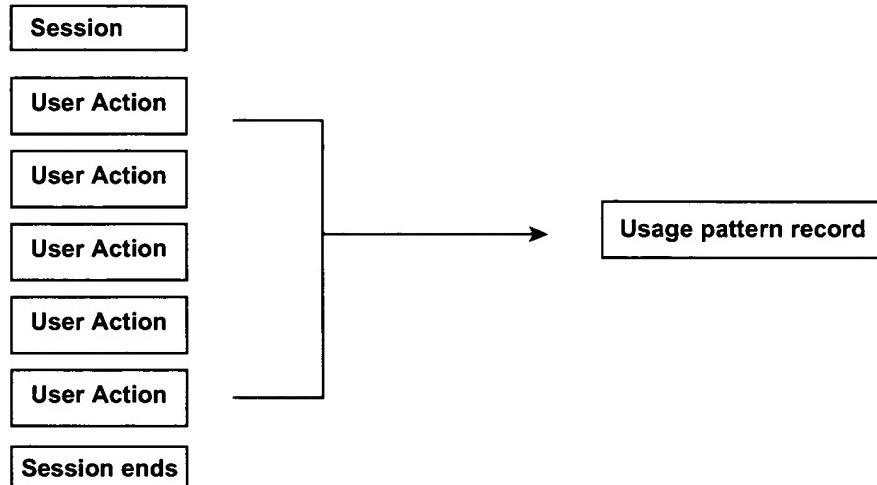


C) Format of History database

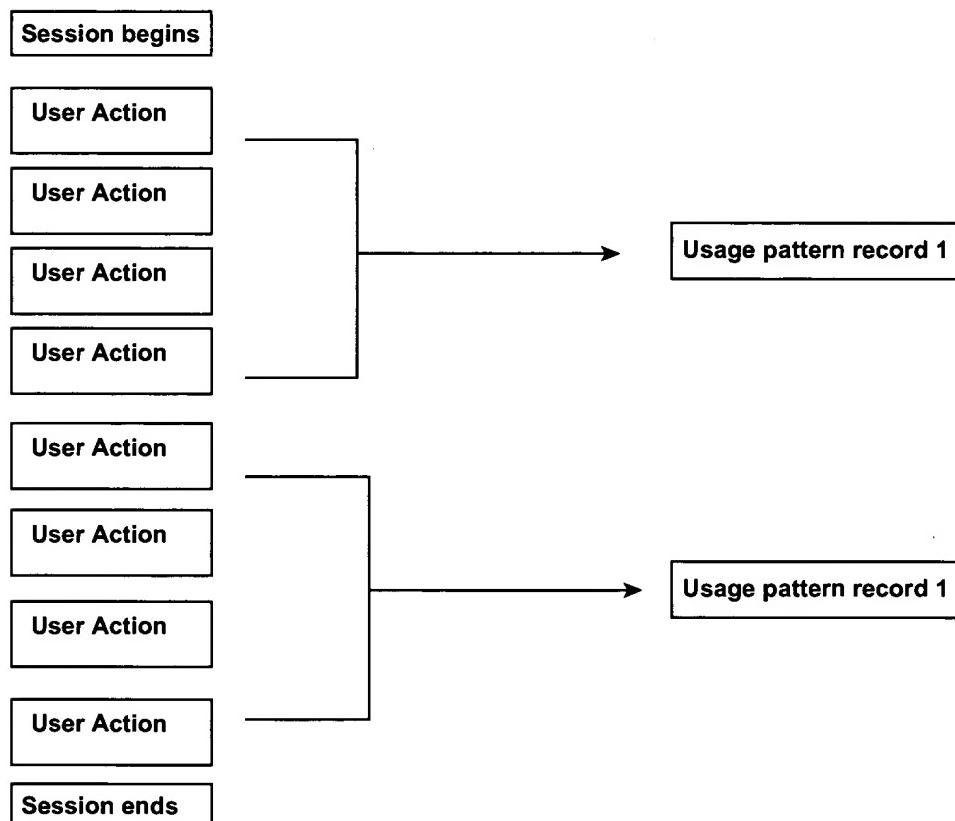


D) Format of Usage pattern record

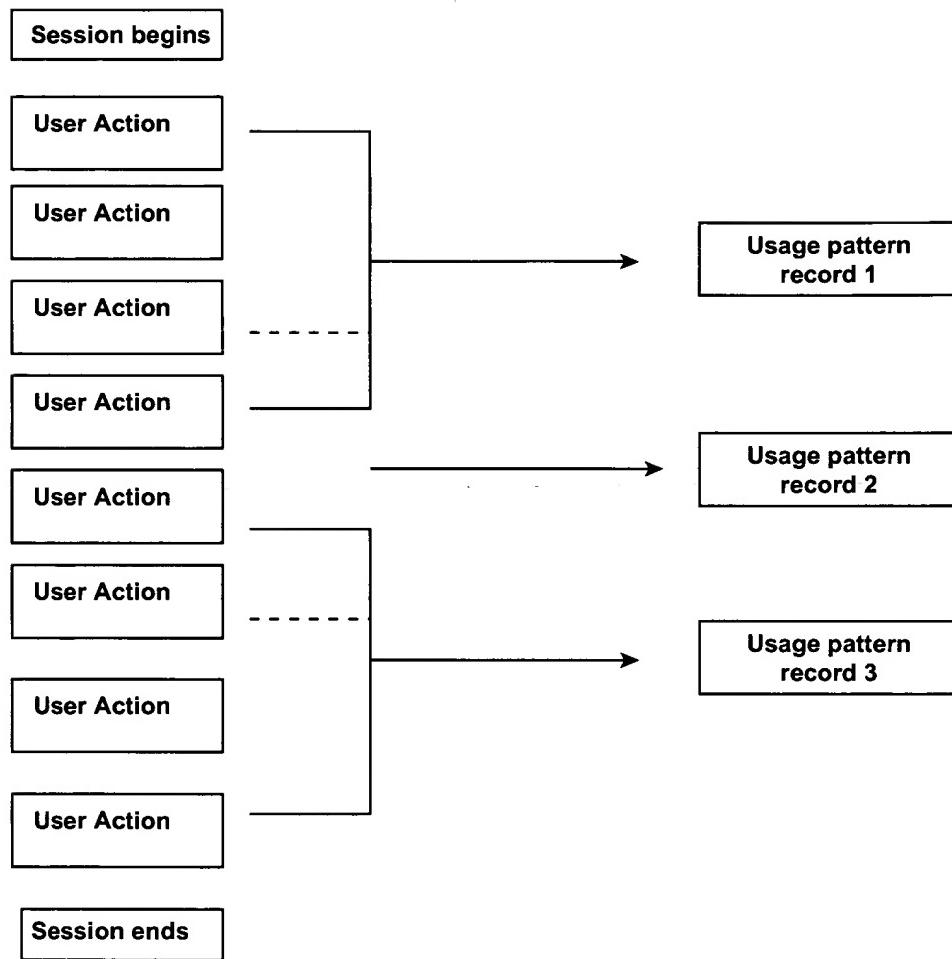
FIG. 37



A) One method for creating usage pattern



B) One method for creating usage pattern



One method for creating usage pattern record

FIG. 39

+

46 / 50

Process for Predicting currently active profiles

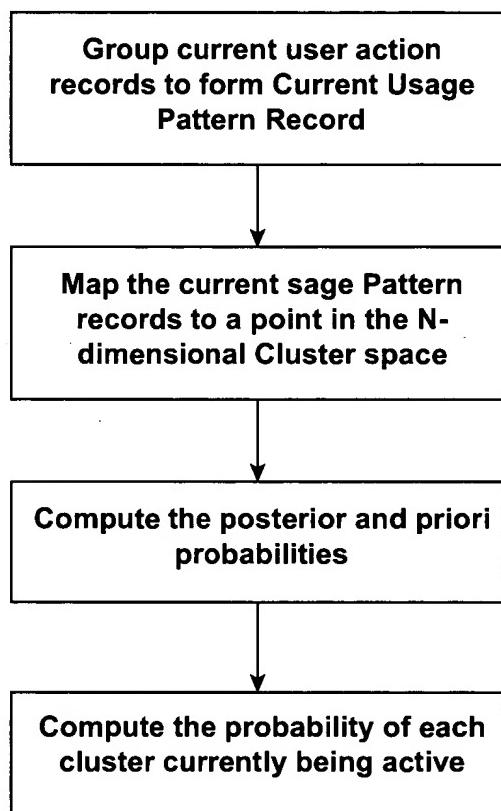
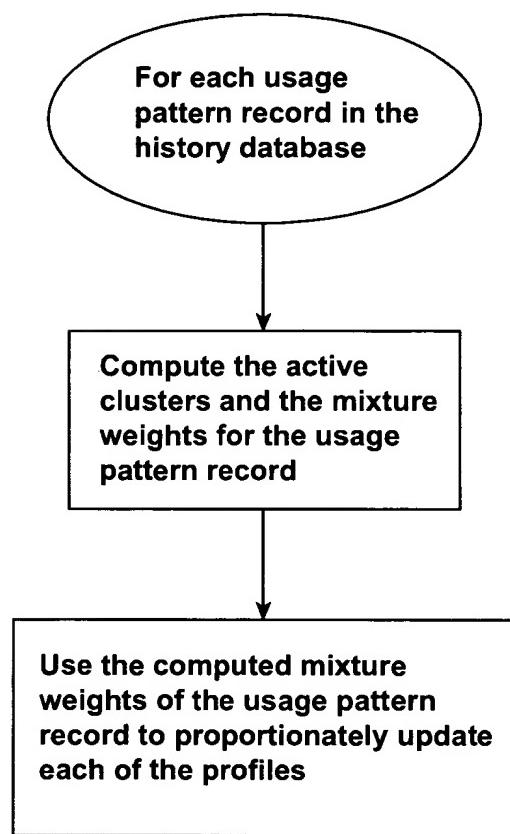


FIG. 40

+

**Profile Creation using Generated Clusters**



**FIG. 41**

Targeted Electronic Content Distribution without compromising privacy of users

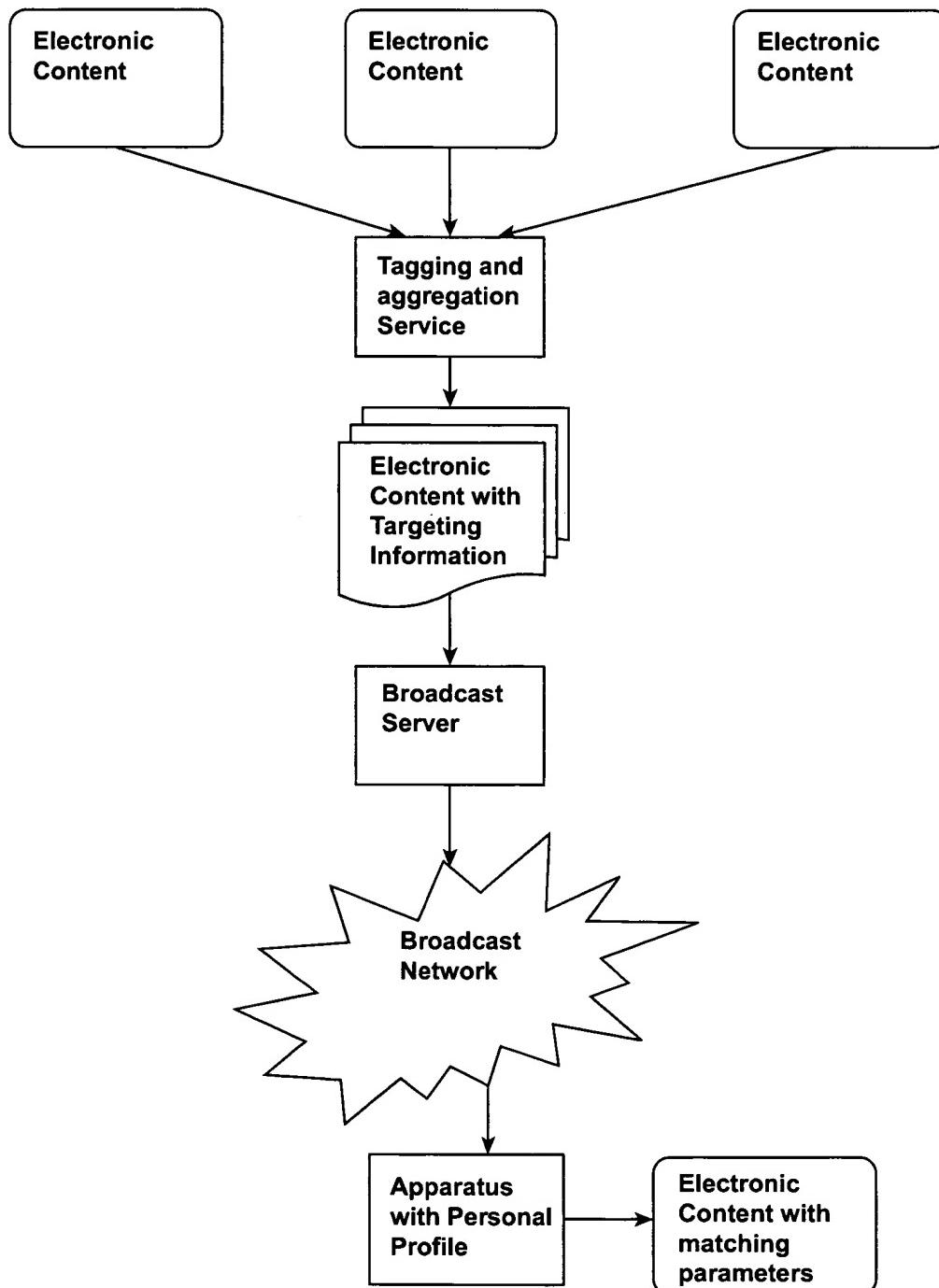


FIG. 42

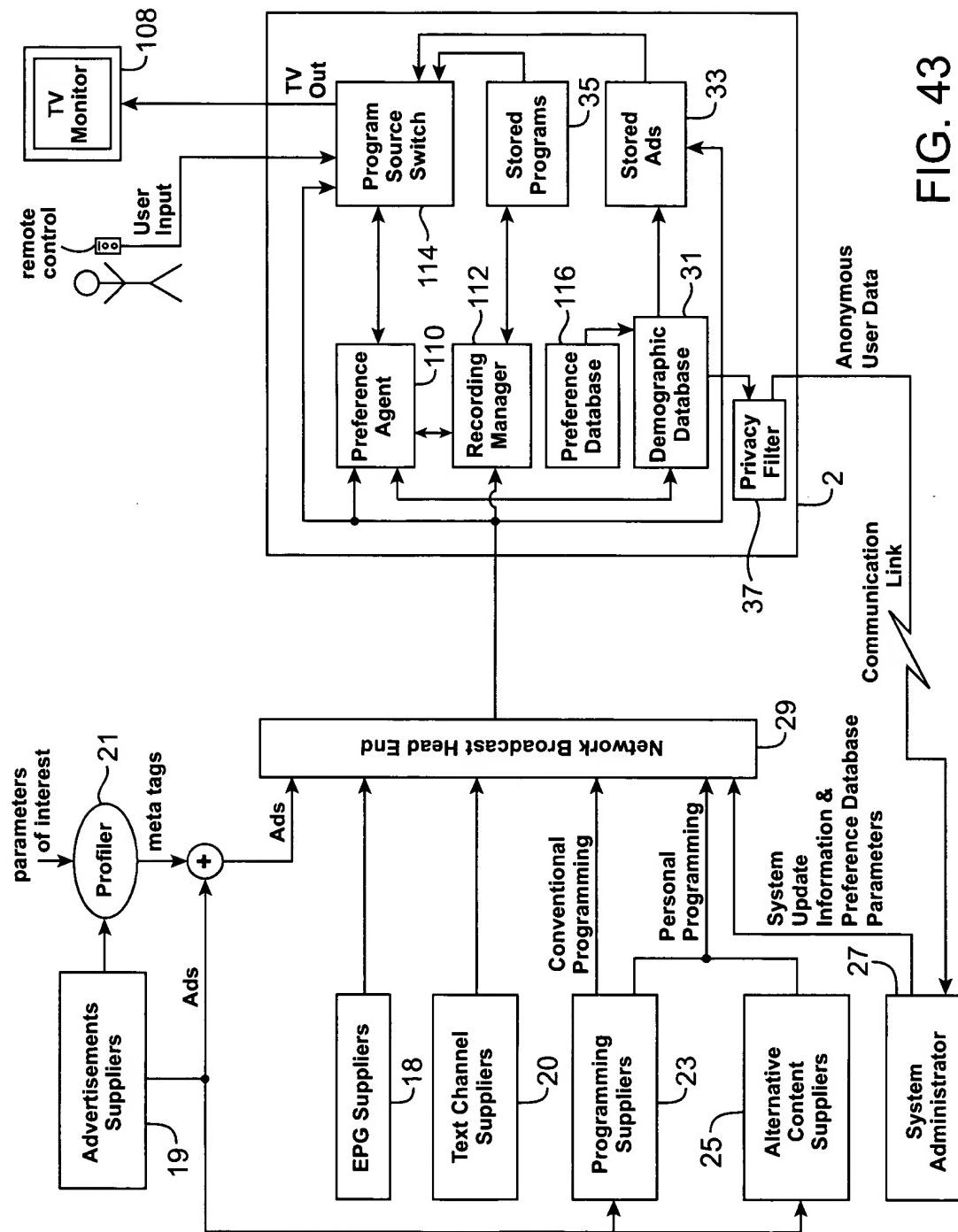
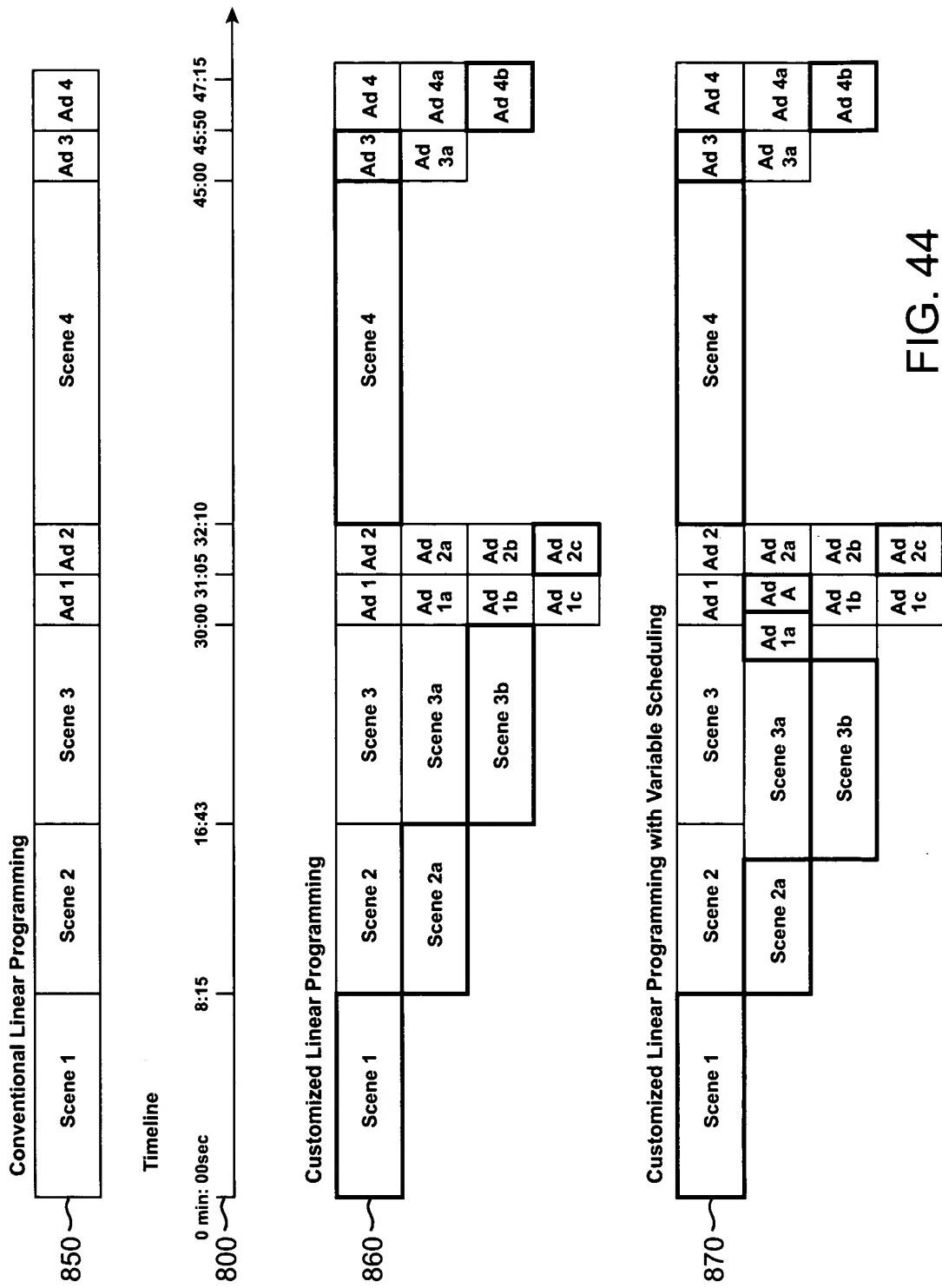


FIG. 43



**FIG. 44**